# CHAPTER 13 EXISTING STATE, LOCAL, AND FEDERAL RULES

This chapter addresses the EPA's responses to public comments on existing state, local, and federal rules in the EPA's Proposed *Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources*.

Commenters also raised issues on topics that are not covered by this chapter. Please refer to the following chapters for responses specific to those issues:

- Chapter 1: Source Category
- Chapter 2: Regulation of Methane
- Chapter 3: Well Completions
- Chapter 4: Fugitives Monitoring
- **Chapter 5**: Pumps
- Chapter 6: Controllers
- Chapter 7: Compressors
- Chapter 8: Equipment Leaks at Natural Gas Processing Plants
- Chapter 9: Liquids Unloading
- Chapter 10: Storage Vessels
- Chapter 11: Compliance
- Chapter 12: Regulatory Impact Analysis
- Chapter 14: Subpart OOOO
- Chapter 15: Miscellaneous
- Chapter 16: Comment Period Extension

### 13.1 Existing State, Local, and Federal Rules

Commenter Name: Jessica Bassett, Director of Regulatory Projects, Environmental Law Project

**Commenter Affiliation:** University of Pennsylvania Law School **Document Control Number:** EPA-HQ-OAR-2010-0505-6247

**Comment Excerpt Number: 9** 

# Comment: Do Existing State Requirements Demonstrate Compliance with this Proposed Rule?

The EPA's proposed rule, Oil and Natural Gas Sector: Emissions Standards for New and Modified Sources (80 FR 5693) is geared to complement existing state requirements with regard to monitoring, record keeping, and reporting. In assessing its potential efficacy, it is thus worthwhile to compare what the rule intends to do with what is already being implemented by the states. This is further encouraged by the EPA's assertion that the best available control technology (BACT) for methane matches what is already in place for volatile organic compounds (VOCs) and sulfur dioxide. As might be expected, there is great variance across the political landscape, with some states offering their own extensive regulation and others displaying difficulty complying with the minimum requirements already in place under the Clean Air Act.

The proposed rule chiefly governs new source performance standards being updated for portions of the oil and gas production process that were not previously covered. This includes new sources, such as hydraulically fractured oil well completions (commonly known as "fracking"), pneumatic pumps, and fugitive emissions from well sites and compressor stations. It also covers a new greenhouse gas, methane, for all of these sources, as well as those that were already regulated.

For compressors, the rule seeks a 95 percent reduction of covered emissions. It also requires that operators replace the rod packing periodically based either on use, time, or the route of the emissions. Pneumatic controllers would be subject to a natural gas bleed rate of 6 standard cubic feet per hour. For natural gas plants, the rate would be zero. There would also be a 95 percent emissions reduction for pneumatic pumps and a zero emission mandate for pumps at natural gas plants. Fracking emissions would be combated, when feasible, with use of reduced emissions completions in combination with a completion combustion device. Finally, fugitive emissions would be monitored with semiannual surveys, which would mandate repairs within 15 days when any emissions are found. The frequency of surveys would increase when emissions are found at a rate higher than three percent and decrease when emissions are fewer than one percent.

**Response:** Comment is a supportive comment to which no response is required. For information on related state actions, please see Section III.E of the preamble to the final rule.

Commenter Name: Jessica Bassett, Director of Regulatory Projects, Environmental Law Project

**Commenter Affiliation:** University of Pennsylvania Law School **Document Control Number:** EPA-HQ-OAR-2010-0505-6247

**Comment Excerpt Number: 10** 

**Comment:** To date, three states already have regulations curtailing the fugitive emissions of methane: Colorado, Wyoming, and Ohio.

Colorado, through its Regulation Number 7, requires testing and calibration procedures in accordance with EPA methods under 40 CFR Part 60. This includes annual monitoring of pump seals, valves, processor drains, and compressor seals. Routine weekly visual monitoring is also required, as is 24 hour monitoring in cases where leaks are observed. Record keeping includes the names of the involved component, its location, the dates of leak discovery and repair, leaks that cannot be repaired, total number of components checked, and the calibration of the monitoring tool. The reporting requirements are quarterly, and the reports must be maintained for two years.

Wyoming, under Title 35, Chapter 11 of state law, requires monitoring of emissions every six months. The law also mandates simultaneous compliance reporting to its Department of Public Health and Safety. Further, permit applications, compliance plans, schedules of compliance, monitoring reports, certifications, and permits must be made available to the public. Permits are subject to termination, modification, or revocation for failure to comply. These requirements are placed upon any stationary source or group that has the potential to emit 100 tons or more per year of any pollutant, ten tons of any hazardous pollutant, or a combination of 25 tons of hazardous pollutants regulated under the Clean Air Act. This threshold applies to major stationary sources as defined by that Act.

Ohio's efforts have been implemented through rules under its General Permit Program for drilling issued by the state Environmental Protection Agency. Under these rules, drilling equipment must be scanned quarterly to test for emissions. Any leaks found should have an attempted repair within five days. Operators are required to submit leak detection and repair reports on an annual basis. Semiannual or annual checks would then be required in subsequent years if leaks are kept at a low level. If leaks exceed two percent, however, the operators must comply quarterly. This is in addition to the monthly reporting requirements under Section 3745-21 of the Ohio Administrative Code relating to VOCs. The sources covered adhere to the Clean Air Act.

As these states have led the way by requiring methane monitoring, reporting, and record keeping prior to any mandate by the EPA, there is some reason to be hopeful that they would already be in compliance with the proposed rule. That the state requirements echo the language of the rule in some respects and are tailored to the Clean Air Act provides further reason for optimism.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6247, Excerpt 9.

Commenter Name: Jessica Bassett, Director of Regulatory Projects, Environmental Law Project

**Commenter Affiliation:** University of Pennsylvania Law School **Document Control Number:** EPA-HQ-OAR-2010-0505-6247

Comment Excerpt Number: 11

Comment: The next group of states that would likely have little trouble with the transition to the EPA's proposed rule are those states that have state emissions plans that go above and beyond the Clean Air Act requirements, although their regulations on methane may not be similar to the previously mentioned states. Two states that have implemented such plans and also have large production of oil and gas are Pennsylvania and West Virginia. Given the high natural gas production and proximity of each state, it is not surprising that some of the provisions in each regulation are similar. Furthermore, although both states have emissions regulations, Pennsylvania's regulations are more extensive than West Virginia's. Both these states have regulations that focus on leak detection and repair, as is the focus in the previously mentioned states, as well.

Pennsylvania has enacted many of its requirements under Exemption Number 38, which, similar to the previous states, targets specific equipment than the EPA's proposed rule. Similar to Colorado, Pennsylvania has put in specific requirements targeting the reduction of emissions for natural gas fired engines, storage vessels, and glycol dehydrators. Pennsylvania has also gone farther than Colorado in certain aspects, including regulating emissions on turbines. All of these regulations require a specific amount of emissions reduction based on the amount of emissions normally detected (as is common). The regulations under Exemption Number 38 target VOC emissions, and the only noticeable methane reduction regulations come under the LDAR requirements. Although not explicitly mentioned, the reduction requirements would require the use of technology to record and capture emissions. Given that companies in Pennsylvania have been doing this for a few years, it is perfectly reasonable that the same could be done for methane emissions requirements.

Although it has not gone as far as the states in Group 1, Pennsylvania has addressed methane emissions with its LDAR requirements. Under the LDAR, standard operators are required to conduct leak detection at compressor stations and processing facilities on a monthly basis using audible, visual, and odor detection on a 15-day basis and forward-looking infrared (FLIR) cameras on a quarterly basis. All methane leaks must be fixed within 15 days. Furthermore, all well pads (including surrounding piping) must be inspected on an annual basis, and any leaks must be repaired within 15 days.

There is a clear desire to regulate methane emissions in Pennsylvania. Therefore, requiring further monitoring and reduction on equipment that is already required to handle other emissions should not be an issue for the Commonwealth. West Virginia does not have as stringent emissions standards as Pennsylvania, but it does appear that the state is attempting to take some action to regulate emissions. West Virginia has specific state regulations on flaring, truck load-out emissions, and glycol dehydrators. Although this may not seem like much, it does show that the state has taken some steps to reduce emissions.

One thing to consider is that West Virginia has openly opposed the EPA's proposed rule. West Virginia senators stated that they would oppose the rule because it would put undue costs on the industry. In addition, the senators pointed out that methane emissions have been cut by 35% since 2007. Although these arguments were made to show that regulations are not needed, they actually support the theory that it would not be difficult to transition into the EPA's proposed rule. Since West Virginia has other regulations limiting emissions, the addition of technology to monitor and reduce methane emissions would likely not be an undue cost on the industry.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6247, Excerpt 9.

Commenter Name: Jessica Bassett, Director of Regulatory Projects, Environmental Law Project

**Commenter Affiliation:** University of Pennsylvania Law School **Document Control Number:** EPA-HQ-OAR-2010-0505-6247

**Comment Excerpt Number: 12** 

**Comment:** Where the EPA is likely to get the biggest pushback is from the big oil and gas producing states in the South and Midwest. Although some of the states in the Midwest have already put methane reduction plans in place (such as the states previously mentioned), most of the states have the bare minimum regulations required by the Clean Air Act. This pushback comes as no surprise, though, as the same states opposing this proposed rule tend to oppose environmental regulations generally. The question here is not about pushback, however: it is about whether the states would be able to transition to the new rule without incurring a significant burden.

The states that have put in place very few regulations may have more difficulty transitioning to the proposed regulations based on the gap between the current system and the proposed one. Current regulations do require monitoring, reduction of emissions, and reporting of emissions/emissions reductions; however, these current regulations are nowhere near as extensive as those that would be required under the proposed EPA rule. For example, the EPA proposed rule has additional requirements for certain equipment and different drilling situations. While the current regulations may cover some or most of this equipment, they do not require the emissions monitoring and reduction technology that would be required by the proposed rule.

Some may point out the ease that Colorado, Wyoming, Ohio, and Pennsylvania had in implementing higher emissions standards (some of which include methane reduction requirements). It is certainly true that these states have gone above and beyond the federal requirements, but that is exactly the issue with the argument. It is clearly possible to reduce methane emissions, and states that have already taken some action will have little trouble transitioning to meet the requirements of the proposed rule. States that have only been following the current regulations, however, will have much more difficulty transitioning to the proposed rule. Texas alone has over 300,000 active oil and gas wells. The proposed EPA rule would require methane capture technology to be installed on many of the wells and

surrounding equipment. This could be a significant burden on many of the operators because not only would there be substantial installation costs (overall), but the monitoring requirements may necessitate additional manpower.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6247, Excerpt 9.

Commenter Name: Jessica Bassett, Director of Regulatory Projects, Environmental Law Project

**Commenter Affiliation:** University of Pennsylvania Law School **Document Control Number:** EPA-HQ-OAR-2010-0505-6247

**Comment Excerpt Number: 13** 

**Comment:** Despite the drawbacks described above, it is unlikely that it will be difficult for most states to transition to the proposed rule. The biggest issue will be the initial installation of the methane recapture and monitoring equipment, which could result in significant pushback in states such as Texas, where there are a large number of oil- and gas-producing well-sites. States like Colorado, Wyoming, and Ohio have already taken major steps in reducing methane emissions. The EPA's proposed rule actually follows many of the reduction requirements in the Wyoming and Colorado state regulations.

The big differences between current regulations and the proposed rule are the state focus on LDAR as well as the focus on regulating specific equipment. But these differences will not harm the states because the EPA's proposed rule will merely add some equipment to the regulated list. States are free to further regulate emissions on other equipment. States such as Pennsylvania that have strong emissions standards already will see a smooth transition to the EPA's proposed regulations. Pennsylvania already has emissions reductions requirements and monitoring standards. Although there may be initial work to add methane recapture technology to the equipment, it should not put a large burden on the operators.

There is a clear move among certain states to reduce methane emissions. Requiring these reductions on a national level should not be difficult for most others.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6247, Excerpt 9.

**Commenter Name:** James Martin **Commenter Affiliation:** Noble Energy

**Document Control Number: EPA-HQ-OAR-2010-0505-6852** 

**Comment Excerpt Number: 24** 

**Comment:** <u>EQUIVALENCY OF STATE PROGRAMS</u>. States such as Colorado, Pennsylvania, Ohio, and Wyoming have developed comprehensive technology-based leak detection and repair programs that are designed to achieve the same goals as EPA's fugitive emissions program. Those programs were developed with significant public and industry participation. At the same

time, operators such as Noble have invested significant time and resources in developing internal programs to comply with those state programs. Noble developed software to direct and track surveys and repairs, hired and trained personnel, acquired OGI devices as well as trucks, computers and other associated equipment, and hired back office staff to manage the data generated by the company's surveys and repair records.

A national technology-based LDAR program- regardless of how it is constituted- necessarily will effectively duplicate these state programs. However, it is very probable that EPA's final fugitive emissions program will differ in significant respects from some or even all of these state programs. That would require companies such as Noble to significantly revise or even develop new software, train personnel for a new system, and make other investments to make a duplicative EPA program work. In effect, Noble's investment in programs such as Colorado's Regulation 7 will have been wasted.

The state programs such as those noted above all focus on identifying and repairing leaking components. Each state was able to develop a fugitive emissions program that was tailored to the economic, geologic, and operational circumstances of that state, offering a level of flexibility a national federal program cannot offer. In addition, the modest differences among these state programs will provide valuable information over time on what procedures and methods are most successful, what components are most likely to develop leaks, and other data that will enable both EPA and the states to refine their fugitive emissions programs over time. Noble hopes and anticipates that as innovative new monitoring technologies develop, states also will prove to be important laboratories where those technologies can be most readily tested.

For all of these reasons, Noble strongly urges EPA to incorporate in its final rule a mechanism that would allow states to enforce and companies to comply with state fugitive emissions programs that are equivalent to those adopted by EPA. The state programs would not have to be identical to the EPA final rule; in fact, that would be counterproductive. Since OGI technologies and fugitive emissions programs are subject to many uncertainties, it would be a wise policy choice to promote some degree of diversity among state programs.

Noble recognizes that it may be challenging for EPA to develop a method for determining whether state programs are "equivalent" to the final EPA rule. However, Noble suggests that the agency consider a provision that would exempt from coverage under the EPA fugitive emissions program those well sites that are subject to legally and practicably enforceable leak detection and repair programs that are established either in an operating permit or are codified in state regulatory programs.

**Response:** Commenter asserts the importance of complementing current state and federal regulations in order to limit potential conflicts. Please see documentation available in the docket for more information on fugitives and related state actions. <sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> Memorandum to Jodi Howard, U.S. EPA, from Bradley Nelson, EC/R Inc. "Comparison of State Leak Detection and Repair Programs." April 6, 2016, available in Docket ID EPA-HQ-OAR-2010-0505.

Commenter Name: Howard J Feldman

**Commenter Affiliation:** American Petroleum Institute

**Document Control Number: EPA-HQ-OAR-2010-0505-6884** 

**Comment Excerpt Number: 56** 

# Comment: EPA SHOULD PROVIDE AN EXEMPTION FOR SOURCES ALREADY REGULATED BY AN ENFORCEABLE STATE PROGRAM

Numerous states have been proactive in developing regulatory programs to address emissions from the oil and natural gas operations. Clearly EPA is well aware of these programs, as Wyoming and Colorado programs are mentioned numerous times in the September 18, 2015 preamble for the proposed regulations. In fact, EPA relied heavily on aspects of the programs in these states in developing the proposed NSPS subpart OOOOa requirements. EPA also utilized technical information developed by the states to assist in the estimation of the impacts of the proposed federal rules.

The existing regulatory programs in Colorado and Wyoming, as well as other states, are in full force and are being successfully implementing and achieving reductions in VOC and methane emissions. As new oil and natural gas operations begin, they are subject to these regulations. And these regulations cover the same emission sources, typically with the same basic control requirements, as the proposed subpart OOOOa. If EPA moves forward with subpart OOOOa as proposed, the result will be that sources will be subject to overlapping and duplicative requirements. This situation will result in increased financial burden for the oil and gas industry without any environmental benefit.

In order to avoid this situation, API requests that EPA include provisions in the final subpart OOOOa that would clarify that sources that are subject to legally and practically enforceable requirements that address the same emission sources are not affected facilities under the rule. The precedent for this provision has already been established for this industry, as storage vessels can avoid being a subpart OOOO affected facility by having legally and practically enforceable requirements – see §60.5365(e).

For the fugitive emission standards for well sites and compressor stations, this request is discussed in detail in 27.2.2. However, API believes that it is warranted that such a provision also apply to well completions, compressors, and pneumatic pumps.

### API recommends the following regulatory changes in §60.5365a.

### §60.5365a

- (a)(5) A well completion operation in compliance with a legally and practically enforceable requirement that requires the reduction of VOC or methane is not an affected facility.
- (b) Each centrifugal compressor affected facility, which is a single centrifugal compressor using wet seals. A centrifugal compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart. A centrifugal compressor in

compliance with a legally and practically enforceable requirement that requires at least a 95% reduction in VOC or methane emissions is not an affected facility.

- (c) Each reciprocating compressor affected facility, which is a single reciprocating compressor. A reciprocating compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart. A reciprocating compressor in compliance with a legally and practically enforceable requirement that requires the reduction of VOC or methane is not an affected facility.
- (h)(1) For natural gas processing plants, each pneumatic pump affected facility, which is a single natural gas driven chemical/methanol pump or natural gas-driven diaphragm pump.
- (2) For locations other than natural gas processing plants, each pneumatic pump affected facility, which is a single natural gas-driven chemical/methanol pump or natural gas-driven diaphragm pump for which a control device is located on site. A pneumatic pump that is in compliance with a legally and practically enforceable requirement that requires the reduction of VOC or methane is not an affected facility.

Note that there are additional revisions to §60.5365a(h)(1) and §60.5365a(h)(2) proposed in Section 24.4.1 and Section 24.4.5. See 24.4.5 for combined language.

Recommended regulatory changes for the fugitive program are provided in section 27.2.12.

Also, additional changes are recommended to various aspects of §60.5365a throughout this comment document. Specifically, see sections 22.2.2 and 22.2.3 for recommended changes for wells (completions), 24.3.3, 24.4.1, and 24.4.5 for pneumatic pumps, 25.1 and 25.2 for storage vessels, and 27.2.12.

**Response:** Commenter asserts the importance of complementing existing state and federal regulations in order to limit potential conflicts. For information on related state actions, please see section III.E of the preamble to the final rule. Please see documentation available in the docket for more information on fugitives and related state actions. <sup>2</sup>

Commenter Name: Andrew Casper

**Commenter Affiliation:** Colorado Oil & Gas Association (COGA) **Document Control Number:** EPA-HQ-OAR-2010-0505-6889

**Comment Excerpt Number: 4** 

**Comment:** The fact that the regulatory measures noted above have focused on VOC reductions (with methane co-benefits) from the O&G sector to address ozone issues is a very important point in the overall context of these comments. As EPA notes, the recently proposed Quad Oa rules "[do not] provide . . . credible health benefits estimates . . . due to the differences in the

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<sup>&</sup>lt;sup>2</sup> Ibid.

locations of oil and natural gas emission points relative to existing information and the highly localized nature of air quality responses associated with HAP and VOC reductions." See RIA at 4-1 (emphasis added). The Colorado experience is illustrative of this point. The DMA/NFR NAA issue is uniquely a Colorado issue—an issue which, as noted above, the state has been working with COGA, other trade associations, and industries for over ten years to address. The mix of stationary emission sources (both inside and outside the O&G sector), population growth, mobile sources, and boundary conditions all contribute in a unique way to the ozone issues confronting the state. COGA strongly believes that the state, not EPA, is best suited to tackle this issue. The state's serious efforts towards this end should not be discounted or negated by a federal rule that, if imposed on top or in place of Colorado's program, might actually make attainment in the DMA/NFR NAA more difficult. The only way to avoid this outcome is for EPA to expressly recognize that compliance with the Regulation No. 7 Program (or, at a minimum, Colorado's LDAR program, as discussed in Section III.D. below) is sufficient to demonstrate compliance with Quad Oa at affected facilities.

**Response:** Commenter asserts the importance of complementing existing state and federal regulations, including Colorado's state regulations, in order to limit potential conflicts. Please see documentation available in the docket for more information on fugitives and related state actions.<sup>3</sup>

Commenter Name: Andrew Casper

**Commenter Affiliation:** Colorado Oil & Gas Association (COGA) **Document Control Number:** EPA-HQ-OAR-2010-0505-6889

**Comment Excerpt Number: 5** 

Comment: The Final Quad Oa Should Expressly Recognize Compliance with Regulation No. 7

COGA respectfully requests that EPA avoid unnecessary and duplicative regulation by making clear that Colorado operators already subject to Regulation No. 7 need not also comply with Quad Oa. Specifically, COGA supports and encourages EPA to determine that compliance with the whole of the Regulation No. 7 Program serves as compliance with Quad Oa. The rationale for this request is simple: the Regulation No. 7 Program, as a whole, generates greater emissions benefits than the proposed federal rule—benefits that are uniquely tailored to the Colorado airshed and which specifically address the DMA/NFR NAA. The following section of COGA's comments provide both legal and policy rationale for this request.

Res	onse: See res	sponse to Do	CN EPA-HO	Q-OAR-2010	0-0505-6889.	Excerpt 4.
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<sup>3</sup> Ibid.			

Commenter Name: W. Michael Scott, General Counsel

Commenter Affiliation: Trilogy Operating, Inc.

**Document Control Number: EPA-HQ-OAR-2010-0505-6603** 

**Comment Excerpt Number: 45** 

Comment: The proposed rules are unnecessary and duplicative of existing state and federal requirements, as well as voluntary industry practices. Emissions are already adequately addressed through state law regimes in most of the major oil and gas producing states. For example, Colorado, Wyoming, Ohio, Pennsylvania, and Texas all have state regulatory requirements designed to limit natural gas emissions from oil and gas operations. These state rules share many of the same goals as the Methane NSPS, but their requirements differ in ways that may make it hard or impossible for operators in those states to comply with both sets of rules. For example, in Colorado the frequency of inspections for well production facilities and compressor stations differ based on their actual uncontrolled VOC emissions, while the Methane NSPS focuses on the percent of leaking components. Colorado also requires audio, visual, and olfactory inspections, while the Methane NSPS mandates that operators use OGI technology for inspections.

These state regimes are continuing to evolve and find creative solutions best designed to address the unique circumstances in their region. Because each geologic formation and shale play is unique, oil and gas operating practices can look very different across varying regions of the country. There is no one-size-fits-all solution. Trilogy believes that EPA's Methane NSPS is unnecessary and should be withdrawn because state regulators are better equipped to address the particular issues in their states. However, if EPA does move forward with this proposal, it should at the very least consult with its state counterparts first to learn from their experiences regulating in this area, and determine if portions of the Methane NSPS are unnecessary, duplicative, or conflict with existing state rules.

This need to coordinate with the states is amplified by the fact that the Methane NSPS intrudes into an area historically regulated by the states and creates duplicative and conflicting regulatory obligations without a commensurate environmental benefit. The Clean Air Act repeatedly recognizes the value of state and federal cooperation and the important role that states play in implementing the Act. Unlike many other air regulations, the Methane NSPS leaves no room for states to exercise regulatory authority over the sources within their borders. Instead, EPA has usurped the state's traditional rule by directly regulating these sites. EPA should be mindful of these concerns, and either withdraw the Methane NSPS or craft a final rule that respects the expertise and traditional role of states in regulating these issues.

**Response:** While the commenter notes that many states have existing programs in place, we disagree that this rule is unnecessary and duplicative. While some states have made progress in establishing standards and reducing emissions, it is important to establish federal standards in order to yield a consistent and accountable national program. This will provide a clear path for states and other federal agencies to further align their programs. For information on related state

actions, please see section III.E of the preamble to the final rule. Please see documentation available in the docket for more information on fugitives and related state actions.<sup>4</sup>

Commenter Name: W. Michael Scott, General Counsel

Commenter Affiliation: Trilogy Operating, Inc.

**Document Control Number: EPA-HQ-OAR-2010-0505-6603** 

**Comment Excerpt Number: 55** 

**Comment:** EPA should consult with its state counterparts to determine ways to ensure that the Methane NSPS is not unnecessarily duplicative of state requirements, and does not create conflicts with existing state requirements.

**Response:** Throughout the rulemaking process, the EPA collaborated with state, local, and tribal governments to gain a better understanding of how they have managed regulatory issues and to get feedback that has helped us develop the final rule. Please refer to section III.D for more information on state outreach.

Commenter Name: W. Michael Scott, Vice President and General Counsel

Commenter Affiliation: CrownQuest Operating, LLC

**Document Control Number: EPA-HQ-OAR-2010-0505-6703** 

Comment Excerpt Number: 41

**Comment:** The proposed rules are unnecessary and duplicative of existing state and federal requirements, as well as voluntary industry practices.

Emissions are already adequately addressed through state law regimes in most of the major oil and gas producing states. For example, Colorado, Wyoming, Ohio, Pennsylvania, and Texas all have state regulatory requirements designed to limit natural gas emissions from oil and gas operations. These state rules share many of the same goals as the Methane NSPS, but their requirements differ in ways that may make it hard or impossible for operators in those states to comply with both sets of rules. For example, in Colorado the frequency of inspections for well production facilities and compressor stations differ based on their actual uncontrolled VOC emissions, while the Methane NSPS focuses on the percent of leaking components. Colorado also requires audio, visual, and olfactory inspections, while the Methane NSPS mandates that operators use OGI technology for inspections.

These state regimes are continuing to evolve and find creative solutions best designed to address the unique circumstances in their region. Because each geologic formation and shale play is unique, oil and gas operating practices can look very different across varying regions of the country. There is no one-size-fits-all solution. CrownQuest believes that EPA's Methane NSPS is

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<sup>&</sup>lt;sup>4</sup> Ibid.

unnecessary and should be withdrawn because state regulators are better equipped to address the particular issues in their states. However, if EPA does move forward with this proposal, it should at the very least consult with its state counterparts first to learn from their experiences regulating in this area, and determine if portions of the Methane NSPS are unnecessary, duplicative, or conflict with existing state rules.

This need to coordinate with the states is amplified by the fact that the Methane NSPS intrudes into an area historically regulated by the states and creates duplicative and conflicting regulatory obligations without a commensurate environmental benefit. The Clean Air Act repeatedly recognizes the value of state and federal cooperation and the important role that states play in implementing the Act. Unlike many other air regulations, the Methane NSPS leaves no room for states to exercise regulatory authority over the sources within their borders. Instead, EPA has usurped the state's traditional rule by directly regulating these sites. EPA should be mindful of these concerns, and either withdraw the Methane NSPS or craft a final rule that respects the expertise and traditional role of states in regulating these issues.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 45.

Commenter Name: W. Michael Scott, Vice President and General Counsel

Commenter Affiliation: CrownQuest Operating, LLC

**Document Control Number:** EPA-HQ-OAR-2010-0505-6703

**Comment Excerpt Number: 48** 

**Comment:** EPA should consult with its state counterparts to determine ways to ensure that the Methane NSPS is not unnecessarily duplicative of state requirements, and does not create conflicts with existing state requirements.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 55.

Commenter Name: Bradley C. Cross, President/Partner Commenter Affiliation: Big Star Oil & Gas, LLC

**Document Control Number:** EPA-HQ-OAR-2010-0505-6757

**Comment Excerpt Number: 40** 

**Comment:** The proposed rules are unnecessary and duplicative of existing state and federal requirements, as well as voluntary industry practices.

Emissions are already adequately addressed through state law regimes in most of the major oil and gas producing states. For example, Colorado, Wyoming, Ohio, Pennsylvania, and Texas all have state regulatory requirements designed to limit natural gas emissions from oil and gas operations. These state rules share many of the same goals as the Methane NSPS, but their requirements differ in ways that may make it hard or impossible for operators in those states to

comply with both sets of rules. For example, in Colorado the frequency of inspections for well production facilities and compressor stations differ based on their actual uncontrolled VOC emissions, while the Methane NSPS focuses on the percent of leaking components. Colorado also requires audio, visual, and olfactory inspections, while the Methane NSPS mandates that operators use OGI technology for inspections.

These state regimes are continuing to evolve and find creative solutions best designed to address the unique circumstances in their region. Because each geologic formation and shale play is unique, oil and gas operating practices can look very different across varying regions of the country. There is no one-size fits-all solution. Big Star believes that EPA's Methane NSPS is unnecessary and should be withdrawn because state regulators are better equipped to address the particular issues in their states. However, if EPA does move forward with this proposal, it should at the very least consult with its state counterparts first to learn from their experiences regulating in this area, and determine if portions of the Methane NSPS are unnecessary, duplicative, or conflict with existing state rules.

This need to coordinate with the states is amplified by the fact that the Methane NSPS intrudes into an area historically regulated by the states and creates duplicative and conflicting regulatory obligations without a commensurate environmental benefit. The Clean Air Act repeatedly recognizes the value of state and federal cooperation and the important role that states play in implementing the Act. Unlike many other air regulations, the Methane NSPS leaves no room for states to exercise regulatory authority over the sources within their borders. Instead, EPA has usurped the state's traditional rule by directly regulating these sites. EPA should be mindful of these concerns, and either withdraw the Methane NSPS or craft a final rule that respects the expertise and traditional role of states in regulating these issues.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 45.

Commenter Name: Bradley C. Cross, President/Partner Commenter Affiliation: Big Star Oil & Gas, LLC

**Document Control Number: EPA-HQ-OAR-2010-0505-6757** 

**Comment Excerpt Number: 47** 

**Comment:** EPA should consult with its state counterparts to determine ways to ensure that the Methane NSPS is not unnecessarily duplicative of state requirements, and does not create conflicts with existing state requirements.

Response: See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 55.

Commenter Name: Glenn Prescott

**Commenter Affiliation:** RK Petroleum Corporation

**Document Control Number:** EPA-HQ-OAR-2010-0505-6788

**Comment Excerpt Number: 41** 

**Comment:** The proposed rules are unnecessary and duplicative of existing state and federal requirements, as well as voluntary industry practices.

Emissions are already adequately addressed through state law regimes in most of the major oil and gas producing states. For example, Colorado, Wyoming, Ohio, Pennsylvania, and Texas all have state regulatory requirements designed to limit natural gas emissions from oil and gas operations. These state rules share many of the same goals as the Methane NSPS, but their requirements differ in ways that may make it hard or impossible for operators in those states to comply with both sets of rules. For example, in Colorado the frequency of inspections for well production facilities and compressor stations differ based on their actual uncontrolled VOC emissions, while the Methane NSPS focuses on the percent of leaking components. Colorado also requires audio, visual, and olfactory inspections, while the Methane NSPS mandates that operators use OGI technology for inspections.

These state regimes are continuing to evolve and find creative solutions best designed to address the unique circumstances in their region. Because each geologic formation and shale play is unique, oil and gas operating practices can look very different across varying regions of the country. There is no one-size-fits-all solution. RK believes that EPA's Methane NSPS is unnecessary and should be withdrawn because state regulators are better equipped to address the particular issues in their states. However, if EPA does move forward with this proposal, it should at the very least consult with its state counterparts first to learn from their experiences regulating in this area, and determine if portions of the Methane NSPS are unnecessary, duplicative, or conflict with existing state rules.

This need to coordinate with the states is amplified by the fact that the Methane NSPS intrudes into an area historically regulated by the states and creates duplicative and conflicting regulatory obligations without a commensurate environmental benefit. The Clean Air Act repeatedly recognizes the value of state and federal cooperation and the important role that states play in implementing the Act. Unlike many other air regulations, the Methane NSPS leaves no room for states to exercise regulatory authority over the sources within their borders. Instead, EPA has usurped the state's traditional rule by directly regulating these sites. EPA should be mindful of these concerns, and either withdraw the Methane NSPS or craft a final rule that respects the expertise and traditional role of states in regulating these issues.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 45.

Commenter Name: Glenn Prescott

**Commenter Affiliation:** RK Petroleum Corporation

**Document Control Number:** EPA-HQ-OAR-2010-0505-6788

**Comment Excerpt Number: 48** 

**Comment:** EPA should consult with its state counterparts to determine ways to ensure that the Methane NSPS is not unnecessarily duplicative of state requirements, and does not create conflicts with existing state requirements.

Response: See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 55.

Commenter Name: W. Jeffrey Sparks

Commenter Affiliation: Discovery Operating, Inc.

**Document Control Number:** EPA-HQ-OAR-2010-0505-6790

**Comment Excerpt Number: 42** 

Comment: Emissions are already adequately addressed through state law regimes in most of the major oil and gas producing states. For example, Colorado, Wyoming, Ohio, Pennsylvania, and Texas all have state regulatory requirements designed to limit natural gas emissions from oil and gas operations. These state rules share many of the same goals as the Methane NSPS, but their requirements differ in ways that may make it hard or impossible for operators in those states to comply with both sets of rules. For example, in Colorado the frequency of inspections for well production facilities and compressor stations differ based on their actual uncontrolled VOC emissions, while the Methane NSPS focuses on the percent of leaking components. Colorado also requires audio, visual, and olfactory inspections, while the Methane NSPS mandates that operators use OGI technology for inspections.

These state regimes are continuing to evolve and find creative solutions best designed to address the unique circumstances in their region. Because each geologic formation and shale play is unique, oil and gas operating practices can look very different across varying regions of the country. There is no one-size-fits-all solution. Discovery believes that EPA's Methane NSPS is unnecessary and should be withdrawn because state regulators are better equipped to address the particular issues in their states. However, if EPA does move forward with this proposal, it should at the very least consult with its state counterparts first to learn from their experiences regulating in this area, and determine if portions of the Methane NSPS are unnecessary, duplicative, or conflict with existing state rules.

This need to coordinate with the states is amplified by the fact that the Methane NSPS intrudes into an area historically regulated by the states and creates duplicative and conflicting regulatory obligations without a commensurate environmental benefit. The Clean Air Act repeatedly recognizes the value of state and federal cooperation and the important role that states play in implementing the Act. Unlike many other air regulations, the Methane NSPS leaves no room for states to exercise regulatory authority over the sources within their borders. Instead, EPA has usurped the state's traditional rule by directly regulating these sites. EPA should be mindful of

these concerns, and either withdraw the Methane NSPS or craft a final rule that respects the expertise and traditional role of states in regulating these issues.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 45.

Commenter Name: W. Jeffrey Sparks

Commenter Affiliation: Discovery Operating, Inc.

**Document Control Number:** EPA-HQ-OAR-2010-0505-6790

**Comment Excerpt Number: 48** 

**Comment:** EPA should consult with its state counterparts to determine ways to ensure that the Methane NSPS is not unnecessarily duplicative of state requirements, and does not create conflicts with existing state requirements.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 55.

**Commenter Name:** Josh W. Luig

Commenter Affiliation: Veritas Energy, LLC

**Document Control Number: EPA-HQ-OAR-2010-0505-6797** 

Comment Excerpt Number: 43

Comment: Emissions are already adequately addressed through state law regimes in most of the major oil and gas producing states. For example, Colorado, Wyoming, Ohio, Pennsylvania, and Texas all have state regulatory requirements designed to limit natural gas emissions from oil and gas operations. These state rules share many of the same goals as the Methane NSPS, but their requirements differ in ways that may make it hard or impossible for operators in those states to comply with both sets of rules. For example, in Colorado the frequency of inspections for well production facilities and compressor stations differ based on their actual uncontrolled VOC emissions, while the Methane NSPS focuses on the percent of leaking components. Colorado also requires audio, visual, and olfactory inspections, while the Methane NSPS mandates that operators use OGI technology for inspections.

These state regimes are continuing to evolve and find creative solutions best designed to address the unique circumstances in their region. Because each geologic formation and shale play is unique, oil and gas operating practices can look very different across varying regions of the country. There is no one-size-fits-all solution. Veritas believes that EPA's Methane NSPS is unnecessary and should be withdrawn because state regulators are better equipped to address the particular issues in their states. However, if EPA does move forward with this proposal, it should at the very least consult with its state counterparts first to learn from their experiences regulating in this area, and determine if portions of the Methane NSPS are unnecessary, duplicative, or conflict with existing state rules.

This need to coordinate with the states is amplified by the fact that the Methane NSPS intrudes into an area historically regulated by the states and creates duplicative and conflicting regulatory obligations without a commensurate environmental benefit. The Clean Air Act repeatedly recognizes the value of state and federal cooperation and the important role that states play in implementing the Act. Unlike many other air regulations, the Methane NSPS leaves no room for states to exercise regulatory authority over the sources within their borders. Instead, EPA has usurped the state's traditional rule by directly regulating these sites. EPA should be mindful of these concerns, and either withdraw the Methane NSPS or craft a final rule that respects the expertise and traditional role of states in regulating these issues.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 45.

Commenter Name: Rick D. Davis, Jr.

Commenter Affiliation: Midland Energy, Inc. and Petroplex Energy, Inc.

**Document Control Number:** EPA-HQ-OAR-2010-0505-6801

**Comment Excerpt Number: 41** 

**Comment:** The proposed rules are unnecessary and duplicative of existing state and federal requirements, as well as voluntary industry practices.

Emissions are already adequately addressed through state law regimes in most of the major oil and gas producing states. For example, Colorado, Wyoming, Ohio, Pennsylvania, and Texas all have state regulatory requirements designed to limit natural gas emissions from oil and gas operations. These state rules share many of the same goals as the Methane NSPS, but their requirements differ in ways that may make it hard or impossible for operators in those states to comply with both sets of rules. For example, in Colorado the frequency of inspections for well production facilities and compressor stations differ based on their actual uncontrolled VOC emissions, while the Methane NSPS focuses on the percent of leaking components. Colorado also requires audio, visual, and olfactory inspections, while the Methane NSPS mandates that operators use OGI technology for inspections.

These state regimes are continuing to evolve and find creative solutions best designed to address the unique circumstances in their region. Because each geologic formation and shale play is unique, oil and gas operating practices can look very different across varying regions of the country. There is no one-size-fits-all solution. MEI believes that EPA's Methane NSPS is unnecessary and should be withdrawn because state regulators are better equipped to address the particular issues in their states. However, if EPA does move forward with this proposal, it should at the very least consult with its state counterparts first to learn from their experiences regulating in this area, and determine if portions of the Methane NSPS are unnecessary, duplicative, or conflict with existing state rules.

This need to coordinate with the states is amplified by the fact that the Methane NSPS intrudes into an area historically regulated by the states and creates duplicative and conflicting regulatory obligations without a commensurate environmental benefit. The Clean Air Act repeatedly

recognizes the value of state and federal cooperation and the important role that states play in implementing the Act. Unlike many other air regulations, the Methane NSPS leaves no room for states to exercise regulatory authority over the sources within their borders. Instead, EPA has usurped the state's traditional rule by directly regulating these sites. EPA should be mindful of these concerns, and either withdraw the Methane NSPS or craft a final rule that respects the expertise and traditional role of states in regulating these issues.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 45.

Commenter Name: Rick D. Davis, Jr.

**Commenter Affiliation:** Midland Energy, Inc. and Petroplex Energy, Inc.

**Document Control Number: EPA-HQ-OAR-2010-0505-6801** 

**Comment Excerpt Number: 46** 

**Comment:** Alternatively, EPA should exempt affected facilities in states with their own state VOC and methane emissions regulations from the requirements in the Methane NSPS.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 45.

Commenter Name: Rick D. Davis, Jr.

Commenter Affiliation: Midland Energy, Inc. and Petroplex Energy, Inc.

**Document Control Number:** EPA-HQ-OAR-2010-0505-6801

**Comment Excerpt Number: 48** 

**Comment:** EPA should consult with its state counterparts to determine ways to ensure that the Methane NSPS is not unnecessarily duplicative of state requirements, and does not create conflicts with existing state requirements.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 55.

Commenter Name: Ben Shepperd

Commenter Affiliation: Permian Basin Petroleum Association Document Control Number: EPA-HQ-OAR-2010-0505-6849

**Comment Excerpt Number: 93** 

**Comment:** Emissions are already adequately addressed through state law regimes in most of the major oil and gas producing states. For example, Colorado, Wyoming, Ohio, Pennsylvania, and Texas all have state regulatory requirements designed to limit natural gas emissions from oil and gas operations. These state rules share many of the same goals as the Methane NSPS, but their requirements differ in ways that may make it hard or impossible for operators in those states to

comply with both sets of rules. For example, in Colorado the frequency of inspections for well production facilities and compressor stations differ based on their actual uncontrolled VOC emissions, while the Methane NSPS focuses on the percent of leaking components. Colorado also requires audio, visual, and olfactory inspections, while the Methane NSPS mandates that operators use OGI technology for inspections.

These state regimes are continuing to evolve and find creative solutions best designed to address the unique circumstances in their region. Because each geologic formation and shale play is unique, oil and gas operating practices can look very different across varying regions of the country. There is no one-size-fits-all solution. The PBPA believes that EPA's Methane NSPS is unnecessary and should be withdrawn because state regulators are better equipped to address the particular issues in their states. However, if EPA does move forward with this proposal, it should at the very least consult with its state counterparts first to learn from their experiences regulating in this area, and determine if portions of the Methane NSPS are unnecessary, duplicative, or conflict with existing state rules.

This need to coordinate with the states is amplified by the fact that the Methane NSPS intrudes into an area historically regulated by the states and creates duplicative and conflicting regulatory obligations without a commensurate environmental benefit. The Clean Air Act repeatedly recognizes the value of state and federal cooperation and the important role that states play in implementing the Act. Unlike many other air regulations, the Methane NSPS leaves no room for states to exercise regulatory authority over the sources within their borders. Instead, EPA has usurped the state's traditional rule by directly regulating these sites. EPA should be mindful of these concerns, and either withdraw the Methane NSPS or craft a final rule that respects the expertise and traditional role of states in regulating these issues.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 45.

Commenter Name: John Robitaille

**Commenter Affiliation:** Petroleum Association of Wyoming (PAW) **Document Control Number:** EPA-HQ-OAR-2010-0505-6854

**Comment Excerpt Number: 14** 

Comment: PAW is particularly concerned with EPA's promulgation of rules duplicative of state requirements. The State of Wyoming has developed stringent regulations for oil and gas development, including regulations pertinent to reduction in emissions and the protection of air quality. The Wyoming Department of Environmental Quality ("WDEQ") already requires best available control technologies ("BACT") (Chapter 6, Section 2 Oil and Gas Production Facilities Permitting Guidance (Guidance)). Additionally, WDEQ has the authority to manage air quality in Wyoming, and as BACT is constantly changing, WDEQ is the proper agency to regulate air quality in Wyoming. Furthermore, the EPA proposes additional, and almost identical, requirements currently in place in Wyoming. PAW believes the state is in the best position to maintain regulation of air quality as they have the personnel, budget and expertise necessary to efficiently and effectively implement the rules.

Given its unique infrastructure and environment, Wyoming is best suited to address air quality and general regulation of oil and gas operations individually. PAW is concerned that implementation of the proposed changes may exacerbate the current decline in oil and natural gas production on federal lands. According to the Institute for Energy Research, federal regulation increases have caused a 40% decline in oil production on federal lands since the year 2000. Oil and natural gas wells need to be continually drilled or state and national production will continue to decline. Introducing redundant regulations that cause unnecessary delays in the permitting process will only cause further declines of both oil and natural gas production on federal lands. Such declines will have a severe negative effect on Wyoming's tax revenue and employment numbers, will increase the costs for energy to all consumers, and will increase this country's reliance on imports from parts of the world that are currently experiencing substantial cultural upheaval and political turmoil.

Wyoming's economy is heavily dependent on mineral revenues and employment. In 2008, the Wyoming Business Alliance requested a study by the firm of Booz, Allen and Hamilton to analyze the level of importance of the oil and gas extraction industries, in terms of revenue and employment, to the state. The study was authored by three Ph.D.'s including one from the University of Wyoming. The study focused on five oil and gas activities to estimate the economic contribution to the state, including drilling, completing and recompleting wells, extraction operations, mineral royalty payments for access to private minerals, and extraction taxes paid to the state and counties of Wyoming. Other capital investments, pipeline investments and refinery impacts were not considered.

The analysis indicated that an estimated \$15.5 billion in total economic output (i.e. both direct and downstream economic impacts) resulted from drilling, completion, recompletion, and extraction activities in 2007, 77% of which is attributed to extraction activities. Royalty, lease payments and extraction tax payments totaled approximately \$18.6 billion. Oil and gas activities within the state employed over 73,000 people in direct and indirect jobs. In Wyoming, roughly 50% of the surface estate and 66% of the mineral estate is owned by the federal government. If delays and extra expenses caused by redundant regulations are not prevented, the Wyoming economy will suffer.

PAW strongly recommends that EPA consider provisions for exempting Subpart OOOOa sources from being affected facilities if there is an equivalent enforceable state requirement as was done for storage vessels. Leak detection, Reduced Emission Completions, and pneumatic pumps, and pneumatic controllers are source candidates for affected facility exemptions in Wyoming as the state already has strong, enforceable requirements for each.

Response: See response to DCN EPA-HQ-OAR-2010-0505-6884, Excerpt 56.

Commenter Name: Michael Hollis

Commenter Affiliation: Diamondback E&P LLC

**Document Control Number:** EPA-HQ-OAR-2010-0505-6869

**Comment Excerpt Number: 11** 

Comment: The proposed rules are unnecessary and duplicative of existing state and federal requirements, as well as voluntary industry practices.

Emissions are already adequately addressed through state law regimes in most of the major oil and gas producing states. For example, Colorado, Wyoming, Ohio, Pennsylvania, and Texas all have state regulatory requirements designed to limit natural gas emissions from oil and gas operations. These state rules share many of the same goals as the Methane NSPS, but their requirements differ in ways that may make it hard or impossible for operators in those states to comply with both sets of rules. For example, in Colorado the frequency of inspections for well production facilities and compressor stations differ based on their actual uncontrolled VOC emissions, while the Methane NSPS focuses on the percent of leaking components. Colorado also requires audio, visual, and olfactory inspections, while the Methane NSPS mandates that operators use OGI technology for inspections.

These state regimes are continuing to evolve and find creative solutions best designed to address the unique circumstances in their region. Because each geologic formation and shale play is unique, oil and gas operating practices can look very different across varying regions of the country. There is no one-size-fits-all solution. Diamondback believes that EPA's Methane NSPS is unnecessary and should be withdrawn because state regulators are better equipped to address the particular issues in their states. However, if EPA does move forward with this proposal, it should at the very least consult with its state counterparts first to learn from their experiences regulating in this area, and determine if portions of the Methane NSPS are unnecessary, duplicative, or conflict with existing state rules.

This need to coordinate with the states is amplified by the fact that the Methane NSPS intrudes into an area historically regulated by the states and creates duplicative and conflicting regulatory obligations without a commensurate environmental benefit. The Clean Air Act repeatedly recognizes the value of state and federal cooperation and the important role that states play in implementing the Act. Unlike many other air regulations, the Methane NSPS leaves no room for states to exercise regulatory authority over the sources within their borders. Instead, EPA has usurped the state's traditional rule by directly regulating these sites. EPA should be mindful of these concerns, and either withdraw the Methane NSPS or craft a final rule that respects the expertise and traditional role of states in regulating these issues.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 45.

Commenter Name: Andrew Casper

**Commenter Affiliation:** Colorado Oil & Gas Association (COGA) **Document Control Number:** EPA-HQ-OAR-2010-0505-6889

**Comment Excerpt Number: 3** 

**Comment:** The Quad Oa rule proposes to amend the new source performance standards (NSPS) for the oil and natural gas source category by setting standards for both methane and volatile organic compounds (VOC) for certain equipment, processes, and activities across the named source category. As described in more detail below, however, the proposed requirements are duplicative and unnecessary in states like Colorado that have established, and are enforcing, aggressive VOC control regimes aimed directly at controlling both VOC and methane emissions from the O&G sector. Although COGA members believe that many aspects of Colorado's final hydrocarbon emissions (including VOCs and methane) control regime applicable to the O&G sector (hereinafter referred to as the Regulation No. 7 Program) are overly burdensome and unnecessary, COGA strongly urges EPA to recognize Colorado's Regulation No. 7 Program (as a whole) by expressly allowing those facilities already in compliance with the Colorado program to be deemed in compliance for purposes of Quad Oa (and thereby exempt from Quad Oa). In the alternative, and at a minimum, COGA requests that EPA: 1) recognize that Colorado's Leak Detection and Repair (LDAR) requirements, including all aspects of the Regulation No. 7 Program that implicate LDAR requirements (e.g., including Storage Tank Emission Management (STEM) system requirements) for the upstream oil and natural gas sector, are adequate to demonstrate equal or greater benefits than would otherwise occur under the proposed federal program; and 2) deem compliance with Colorado's LDAR program sufficient for compliance with leak detection requirements of any final Quad Oa rule (and so exempt from the same). Finally, and understanding that EPA, in part, utilized Regulation No. 7 to inform development of its proposed Quad Oa, COGA offers important lessons learned from Colorado operators' perspective—following implementation of the Regulation No. 7 Program—that are prudent for EPA to consider in development of any final Quad Oa rules.

**Response:** See responses to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 45 and DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 55.

Commenter Name: Denzil R. West, Vice President Commenter Affiliation: Reliance Energy, Inc.

**Document Control Number: EPA-HQ-OAR-2010-0505-6915** 

Comment Excerpt Number: 11

Comment: The proposed rules are unnecessary and duplicative of existing state and federal requirements, as well as voluntary industry practices.

Emissions are already adequately addressed through state law regimes in most of the major oil and gas producing states. For example, Colorado, Wyoming, Ohio, Pennsylvania, and Texas all have state regulatory requirements designed to limit natural gas emissions from oil and gas operations. These state rules share many of the same goals as the Methane NSPS, but

their requirements differ in ways that may make it hard or impossible for operators in those states to comply with both sets of rules. For example, in Colorado the frequency of inspections for well production facilities and compressor stations differ based on their actual uncontrolled VOC emissions, while the Methane NSPS focuses on the percent of leaking components. Colorado also requires audio, visual, and olfactory inspections, while the Methane NSPS mandates that operators use OGI technology for inspections.

These state regimes are continuing to evolve and find creative solutions best designed to address the unique circumstances in their region. Because each geologic formation and shale play is unique, oil and gas operating practices can look very different across varying regions of the country. There is no one-size-fits-all solution. Reliance believes that EPA's Methane NSPS is unnecessary and should be withdrawn because state regulators are better equipped to address the particular issues in their states. However, if EPA does move forward with this proposal, it should at the very least consult with its state counterparts first to learn from their experiences regulating in this area, and determine if portions of the Methane NSPS are unnecessary, duplicative, or conflict with existing state rules.

This need to coordinate with the states is amplified by the fact that the Methane NSPS intrudes into an area historically regulated by the states and creates duplicative and conflicting regulatory obligations without a commensurate environmental benefit. The Clean Air Act repeatedly recognizes the value of state and federal cooperation and the important role that states play in implementing the Act. Unlike many other air regulations, the Methane NSPS leaves no room for states to exercise regulatory authority over the sources within their borders. Instead, EPA has usurped the state's traditional rule by directly regulating these sites. EPA should be mindful of these concerns, and either withdraw the Methane NSPS or craft a final rule that respects the expertise and traditional role of states in regulating these issues.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 45.

Commenter Name: Kathleen M. Sgamma, Vice President, Government and Public Affairs

Commenter Affiliation: Western Energy Alliance

**Document Control Number:** EPA-HQ-OAR-2010-0505-6930

**Comment Excerpt Number: 64** 

Comment: Furthermore, we have concerns about redundancy with existing state regulations. The proposed rule notes the regulations are modeled on state rules in Wyoming and Colorado. 80 Fed Reg. at 56,628. The final rule should be revised so that operators subject to comparable state rules regarding oil well completions are not also required to comply with the federal NSPS oil well completions provisions. If operators have to comply with both federal and state rules that address the same issue, it puts these operators at an economic disadvantage compared to states that do not have such duplicative requirements.

**Response:** The commenter notes that some states have existing programs in place and the potential economic considerations for owners/operators. While some states have established

standards and thereby reduced emissions, it is important to establish federal standards in order to yield a consistent and accountable national program. We carefully evaluated existing state and local programs when developing these federal standards and attempted, where practicable, to limit potential conflicts with existing state and local requirements and manage potential owner/operator burden. In issuing the final rule, the EPA intends to provide a clear path for states to further align their programs, where practicable. Please see section III.E of the preamble to the final rule for more information on relationship with state actions.

Commenter Name: Brandon M. Black, Vice President

Commenter Affiliation: BC Operating, Inc.

**Document Control Number:** EPA-HQ-OAR-2010-0505-6968

**Comment Excerpt Number: 11** 

Comment: The proposed rules are unnecessary and duplicative of existing state and federal requirements, as well as voluntary industry practices.

Emissions are already adequately addressed through state law regimes in most of the major oil and gas producing states. For example, Colorado, Wyoming, Ohio, Pennsylvania, and Texas all have state regulatory requirements designed to limit natural gas emissions from oil and gas operations. These state rules share many of the same goals as the Methane NSPS, but their requirements differ in ways that may make it hard or impossible for operators in those states to comply with both sets of rules. For example, in Colorado the frequency of inspections for well production facilities and compressor stations differ based on their actual uncontrolled VOC emissions, while the Methane NSPS focuses on the percent of leaking components. Colorado also requires audio, visual, and olfactory inspections, while the Methane NSPS mandates that operators use OGI technology for inspections.

These state regimes are continuing to evolve and find creative solutions best designed to address the unique circumstances in their region. Because each geologic formation and shale play is unique, oil and gas operating practices can look very different across varying regions of the country. There is no one-size-fits-all solution. BC believes that EPA's Methane NSPS is unnecessary and should be withdrawn because state regulators are better equipped to address the particular issues in their states. However, if EPA does move forward with this proposal, it should at the very least consult with its state counterparts first to learn from their experiences regulating in this area, and determine if portions of the Methane NSPS are unnecessary, duplicative, or conflict with existing state rules.

This need to coordinate with the states is amplified by the fact that the Methane NSPS intrudes into an area historically regulated by the states and creates duplicative and conflicting regulatory obligations without a commensurate environmental benefit. The Clean Air Act repeatedly recognizes the value of state and federal cooperation and the important role that states play in implementing *the* Act. Unlike many other air regulations, the Methane NSPS leaves no room for states to exercise regulatory authority over the sources within their borders. Instead, EPA has usurped the state's traditional rule by directly regulating these sites. EPA should be mindful of

these concerns, and either withdraw the Methane NSPS or craft a final rule that respects the expertise and traditional role of states in regulating these issues.

EPA should likewise reconsider whether this Methane NSPS is necessary, given existing federal regulations of VOC and greenhouse gas emissions. When EPA released Subpart OOOO, it estimated that the rule would reduce methane emissions by 1.0 to 1.7 million short tons.

Given the reductions already achieved under this existing regulation, the proposed Rules are an unnecessary burden on *the* oil and gas industry that cannot be justified by *the* additional reductions in emissions that would result. In addition, *the* monitoring and reporting requirements in the Methane NSPS are duplicative of the regulations found at Subpart W, which require gas production and processing sites and compressor stations at transmission and storage sites to annually monitor for fugitive emissions and to quantify those emissions.

Finally, *the* Methane NSPS is unnecessary because the oil and gas industry is already effectively addressing methane and VOC emissions through voluntary programs. For example, many industry members have entered into *the* voluntary Natural Gas STAR Methane Challenge Program, which includes recommendations to repair detected leaks. In fact, EPA's own estimates indicate that methane emissions from the oil and gas sector have been steadily decreasing for more than a decade. The oil and gas sector has reduced emissions by more than 20 million metric tons of CO2 equivalent since 1990, despite the tremendous increases in production that occurred during this same period. The industry is continuing to find innovative and cost effective ways to reduce emissions, but EPA's proposed regulations would stymie that innovation by forcing every business to comply with a one-size-fits-all approach. Instead of mandating a particular set of requirements, EPA should continue to monitor progress in the oil and gas sector to evaluate whether additional regulations are really necessary, and, if so, what form they should take.

#### Recommendations:

- 1. EPA should withdraw the Methane NSPS and allow the industry to continue to address natural gas emissions through best practices.
- 2. Alternatively, EPA should exempt affected facilities in states with their own state VOC and methane emissions regulations from the requirements in the Methane NSPS.
- 3. EPA should create a mechanism by which it can review the regimes in individual states and grant exemptions to facilities within those states that are in compliance with state regulations.
- 4. EPA should consult with its state counterparts to determine ways to ensure that the Methane NSPS is not unnecessarily duplicative of state requirements, and does not create conflicts with existing state requirements.

**Response:** See responses to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 45 and DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 55.

**Commenter Name:** Public Hearing Comments On Proposed Climate, Air Quality, and Permitting Rules for the Oil and Natural Gas Industry; Wednesday, September 23, 2015; 9:00

AM - 7:55 PM; Public Hearing #1 - Denver, Colorado

Commenter Affiliation: None

**Document Control Number:** EPA-HQ-OAR-2010-0505-7337

**Comment Excerpt Number: 196** 

**Comment:** I am Kate Fay, and I represent Noble Energy as manager of environmental and regulatory policy. As you know, Noble, along with others, was involved in the development and implementation of Colorado's methane rules. Excuse me. We believe it's important for EPA to learn from that experience. Noble Energy will provide more detailed written comments later, but for now, we have a few comments to offer regarding the air rules, Colorado air rules, and the EPA proposal.

At Noble Energy we believe that taking necessary steps to keep methane in the pipe is the right thing to do. Noble believes adopting methane regulations in Colorado demonstrates that collaboration can result in a strong and workable state-led regulatory regime. The Colorado rules are tough and were designed to achieve additional environmental benefits that are technically and economically feasible. EPA should follow Colorado's lead and support state-led regulatory approaches.

Just as an example, additional requirements contained in the EPA proposal that we were evaluating at this time, would result in significantly higher compliance costs for, among other things, personnel, technology, inspections, recordkeeping and auditing, without apparent additional value or environmental benefit.

Colorado's demonstrated that state government and the oil and natural gas industry, nongovernmental organizations, and the public can and do work together to achieve results that protect human health and the environment while enabling responsible energy development. We believe that the EPA should follow the state's lead. Thank you very much. I look forward to working with you.

Response: See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 55.

**Commenter Name:** Public Hearing Comments On Proposed Climate, Air Quality, and Permitting Rules for the Oil and Natural Gas Industry; Wednesday, September 23, 2015; 9:00

AM - 7:55 PM; Public Hearing #1 - Denver, Colorado

**Commenter Affiliation:** None

**Document Control Number: EPA-HQ-OAR-2010-0505-7337** 

**Comment Excerpt Number: 245** 

**Comment:** I would also like to provide you with some brief comments on Colorado's experience with the 2014 regulations. It is critical to stress that Colorado operators are in the early stages of

implementing these new Colorado rules. Needless to say, there have been bumps along the road during the implementation phase.

We don't yet have a full understanding about what may be working and what may be not. We don't yet have data regarding the regulatory burdens and costs imposed by the Colorado -- the Colorado rules. Thus, it would be premature for the EPA to use Colorado estimates to justify new federal rules; it would be inadequate rule- making to merely adopt the Colorado rules nationwide.

Moreover, there are several reasons to approach the Colorado model with caution. First, they are state-only rules and have not been EPA approved as part of the State Implementation Plan, meaning their air quality benefits have not been proven, to any reasonable degree of scientific certainty.

Second, the DJ, Denver-Jules (sic), Basin is very unique. There is an unusual amount of infrastructure, pipelines, and roads in place that make implementation of the Colorado rules, and the LDAR program in particular, unique compared with other, more rural areas across the country. Because travel costs and the presence of infrastructure tend to be significant cost drivers for rules like those being contemplated, what may be cost effective in Colorado may not be elsewhere.

In closing, COGA appreciates the opportunity to provide this public comment. We encourage the Agency to remain cognizant of the significant regulatory challenges facing our industry and to coordinate its regulatory efforts across federal agencies, with the states. In addition, we very much encourage the Agency to formally recognize established, robust, and stringent programs like Colorado's and allow operators the flexibility to comply with such state programs in place under federal requirements.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 55.

Commenter Name: Morgan Lambert, Deputy Air Pollution Control Officer

Commenter Affiliation: San Joaquin Valley Air Pollution Control District in California

**Document Control Number: EPA-HQ-OAR-2010-0505-6974** 

**Comment Excerpt Number: 2** 

**Comment:** The proposed regulation would largely be duplicative of the District's well-established, rule-required, permit-enforceable fugitive emission control program. The proposed regulation would in many cases be redundant to existing regulations, adding a confusing layer of recordkeeping, reporting, inspection and maintenance plan development. Additionally, the proposed rule would be in large part be less effective than the District's existing, rule-based leak detection and repair practices (LDAR).

We understand from discussions with EPA that the proposed rulemaking is intended to provide consistency and guidance to areas of the U.S. that have had a recent increase in activity in the

oil/gas production industry, without adequate regulatory structure to prevent large emissions increases. We understand the need for such guidance and consistency in such areas, but believe that the proposed changes should not be mandatory for areas such as the San Joaquin Valley with established programs to regulate emissions, including fugitive emissions, from the oil and gas industry.

**Response:** The commenter provides information regarding San Joaquin Valley Air Pollution Control District's fugitive emission control program. The EPA recognizes that there are existing standards in place in some states and localities. We carefully evaluated these programs when developing the final federal standards and attempted, where practicable, to limit potential conflicts with existing state and local requirements. Please see section III.E of the preamble to the final rule for more information on the relationship with state actions. Please see documentation available in the docket for more information on fugitives and related state actions.

Commenter Name: Morgan Lambert, Deputy Air Pollution Control Officer

Commenter Affiliation: San Joaquin Valley Air Pollution Control District in California

**Document Control Number: EPA-HQ-OAR-2010-0505-6974** 

**Comment Excerpt Number: 3** 

Comment: The California Air Resources Board (CARB) has already proposed a more stringent regulation addressing methane emissions from the oil/gas industry. That would require LDAR, control of certain tanks, including those used in certain well stimulation activities. We believe that the proposed CARB regulation, which applies to all components in the oil/gas industry, not solely new and modified operations subject to the NSPS, is more stringent than the proposed Subpart. As such, the proposed Subpart is largely duplicative of the proposed CARS regulation and would add another layer of inspections, recordkeeping, and reporting without any air quality benefit.

Additionally, although District rules do not directly require control of greenhouse gas (including methane) emissions, District rules that require fugitive VOC emissions control, due to the test methods used to identify leaks, also identify leaks of methane and require that such leaks be repaired.

The District requests that the requirements of the proposed Subpart for oil/gas operations not be mandatory in areas, such as the San Joaquin Valley, where such operations are already well controlled due to local rules, and are subject to further controls by CARB's proposed oil/gas fugitive methane regulation.

**Response:** The commenter provides information regarding CARB's regulation addressing methane emissions from the oil/gas industry. The EPA recognizes that there are existing standards in place in some states and localities. We carefully evaluated these programs when

<sup>&</sup>lt;sup>5</sup> Ibid.

developing the final federal standards and attempted, where practicable, to limit potential conflicts with existing state and local requirements. We recognize that in some cases these federal rules may be more stringent than existing programs, and in other cases may be less stringent than existing programs. Please see section III.E of the preamble to the final rule for more information on relationship with state actions. Please see documentation available in the docket for more information on fugitives and related state actions. <sup>6</sup>

Commenter Name: Joe Strickling, Operations Manager

Commenter Affiliation: Patriot Resources, Inc.

**Document Control Number: EPA-HO-OAR-2010-0505-6978** 

**Comment Excerpt Number: 12** 

Comment: The proposed rules are unnecessary and duplicative of existing state and federal requirements, as well as voluntary industry practices.

Emissions are already adequately addressed through state law regimes in most of the major oil and gas producing states. For example, Colorado, Wyoming, Ohio, Pennsylvania, and Texas all have state regulatory requirements designed to limit natural gas emissions from oil and gas operations. These state rules share many of the same goals as the Methane NSPS, but their requirements differ in ways that may make it hard or impossible for operators in those states to comply with both sets of rules. For example, in Colorado the frequency of inspections for well production facilities and compressor stations differ based on their actual uncontrolled VOC emissions, while the Methane NSPS focuses on the percent of leaking components. Colorado also requires audio, visual, and olfactory inspections, while the Methane NSPS mandates that address the particular issues in their states. However, if EPA does move forward with this proposal, it should at the very least consult with its state counterparts first to learn from their experiences regulating in this area, and determine if portions of the Methane NSPS are unnecessary, duplicative, or conflict with existing state rules.

This need to coordinate with the states is amplified by the fact that the Methane NSPS intrudes into an area historically regulated by the states and creates duplicative and conflicting regulatory obligations without a commensurate environmental benefit. The Clean Air Act repeatedly recognizes the value of state and federal cooperation and the important role that states play in implementing the Act. Unlike many other air regulations, the Methane NSPS leaves no room for states to exercise regulatory authority over the sources within their borders. Instead, EPA has usurped the state's traditional rule by directly regulating these sites. EPA should be mindful of these concerns, and either withdraw the Methane NSPS or craft a final rule that respects the expertise and traditional role of states in regulating these issues.

EPA should likewise reconsider whether this Methane NSPS is necessary, given existing federal regulations of VOC and greenhouse gas emissions. When EPA released Subpart OOOO, it estimated that the rule would reduce methane emissions by 1.0 to 1.7 million short tons. Given

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<sup>&</sup>lt;sup>6</sup> Ibid.

the reductions already achieved under this existing regulation, the proposed Rules are an unnecessary burden on the oil and gas industry that cannot be justified by the additional reductions in emissions that would result. In addition, the monitoring and reporting requirements in the Methane NSPS are duplicative of the regulations found at Subpart W, which require gas production and processing sites and compressor stations at transmission and storage sites to annually monitor for fugitive emissions and to quantify those emissions.

Finally, the Methane NSPS is unnecessary because the oil and gas industry is already effectively addressing methane and VOC emissions through voluntary programs. For example, many industry members have entered into the voluntary Natural Gas STAR Methane Challenge Program, which includes recommendations to repair detected leaks. In fact, EPA's own estimates indicate that methane emissions from the oil and gas sector have been steadily decreasing for more than a decade. The oil and gas sector has reduced emissions by more than 20 million metric tons of CO<sub>2</sub> equivalent since 1990, despite the tremendous increases in production that occurred during this same period. The industry is continuing to find innovative and cost effective ways to reduce emissions, but EPA's proposed regulations would stymie that innovation by forcing every business to comply with a one-size-fits-all approach. Instead of mandating a particular set of requirements, EPA should continue to monitor progress in the oil and gas sector to evaluate whether additional regulations are really necessary, and, if so, what form they should take.

#### Recommendations:

- 1. EPA should withdraw the Methane NSPS and allow the industry to continue to address natural gas emissions through best practices.
- 2. Alternatively, EPA should exempt affected facilities in states with their own state VOC and methane emissions regulations from the requirements in the Methane NSPS.
- 3. EPA should create a mechanism by which it can review the regimes in individual states and grant exemptions to facilities within those states that are in compliance with state regulations.
- 4. EPA should consult with its state counterparts to determine ways to ensure that the Methane NSPS is not unnecessarily duplicative of state requirements, and does not create conflicts with existing state requirements.

**Response:** See responses to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 45 and DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 55.

Commenter Name: Kevin Sunday, Manager, Government Affairs

Commenter Affiliation: Pennsylvania Chamber of Business and Industry

**Document Control Number: EPA-HQ-OAR-2010-0505-6995** 

**Comment Excerpt Number: 2** 

**Comment:** The PA Chamber urges that EPA withdraw the Proposed Methane Rule, as it is costly, duplicative and unnecessary given existing state regulatory approaches to air emissions from the oil and gas sector.

# **Existing Regulatory Obligations and Industry Practices Are Achieving Substantial Emissions Reductions in the Oil and Gas Sector**

In Pennsylvania, midstream natural gas gathering, compression and/or processing facilities that are minor sources (as defined by the Clean Air Act) are eligible to be installed and operated in accordance with the state's General Permit 5 (GP-5), which was revised in 2013. The revised GP-5 lowered allowable emission limits for compressor engines at such sources, including oxides of nitrogen (NOx), carbon monoxide (CO), and non-methane/non-ethane hydrocarbon (NMNEHC), by 50 to 90 percent, compared to the previous version of GP-5 and New Source Performance Standards (NSPS) under Subpart JJJJ. The state determined these levels to represent Best Available Technology (BAT). In addition to the inclusion of NSPS OOOO requirements for storage tanks, compressors, and pneumatic controllers, the GP-5 conditions also require the implementation of a monthly leak detection and repair (LDAR) program. Notably, the revised GP-5 also provides a streamlined permitting process by which operators can install additional "beyond BAT" controls to achieve even lower emissions, which allow operators to increase the productivity and efficiency of a compressor station while improving environmental performance. This reduces the need for the overall amount of compressor and processing infrastructure (and its associated environmental impact).

Pennsylvania Department of Environmental Protection (PADEP) also finalized in 2013 revisions to its list of Plan Approval and Operating Permit Exemptions to include certain oil and gas exploration, development and production facilities ("Exemption 38") provided that certain strict emissions limits are met, LDAR is regularly done, and flaring is done only in certain, defined situations, such as in accordance with 40 CFR Part 60, Subpart OOOO or with an enclosed combustion device. Operators are required, per Exemption 38, to maintain emission limits below strict de minimis limits for NOx, volatile organic compounds (VOCs), and hazardous air pollutants (HAPs), as well as to implement an LDAR inspections at producing wells 60 days after production and annually thereafter, with leaks repaired within 15 days. Operators that fail to do so are in violation of the state's air quality laws and regulations and must obtain an Operating Permit from the state to come into compliance.

Further, in August 2012, EPA finalized a rulemaking titled "Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutant Reviews." The rulemaking established new source performance standards for VOCs and sulfur oxides (SOx) from natural gas processing plants and regulated VOC emissions from gas wells, centrifugal compressors, reciprocating compressors, pneumatic controllers and storage vessels. The rulemaking has also been updated three times by EPA in the three years since its

finalization. In addition, this rulemaking package updated emission standards for HAPs from affected dehydration unit and storage vessel sources at upstream sites and transmission and storage facilities.

These state and federal regulatory obligations are achieving notable emissions reductions from the oil and gas sector. While the pollutants targeted by NSPS Subpart OOOO and NESHAP Subparts HH and HHH are VOC and HAP respectively, the implementation of these standards also result in the coincidental reduction of methane due to the types of sources being regulated and the nature of their operations. According to PADEP data, the number of well sites and midstream facilities that reported emissions data in 2013 (the most recent year for which data is available) increased by nearly 15% compared to the year prior (2012). Yet over that same time period, the sector actually *decreased* total methane emissions by more than 13% and total CO emissions by more than 10%. Furthermore, the average emissions per reporting facility decreased for nearly every pollutant (most notably methane, which saw an average reduction of approximately 24% per reporting facility).

More broadly, emissions have decreased across all industrial sectors. Increased production, transmission and use of natural gas have allowed the power generation sector in Pennsylvania to reduce greenhouse gas emissions by 14% since 2005. Industry in the Commonwealth has also, since 2008, taken considerable steps to help improve Pennsylvania's air quality by a significant measure in recent years, in part by increasing use of natural gas statewide. PADEP's emissions inventory data since 2008 show a 68% reduction in SOx, a 42% reduction in particulate matter less than 10 microns (PM10), a 28% reductions in NOx, a 21% reduction in CO and a 20% reduction in VOC. These reductions are having a demonstrated impact on air quality, with PADEP forecasting fewer and fewer severe air quality alerts each year. In 2014, on just 4 days were ozone action days forecasted in one or more regions in Pennsylvania, compared to 28 days in 2012 – a significant development considering PADEP announced near the end of ozone forecasting season in 2012 it would begin adding forecasting for 8 additional regions, for a total of 13 regions.

In conclusion, we believe that the measures that PADEP is taking at the state level, including the rigorous LDAR requirements under Exemption 38 and GP-5, are sufficient regulation of these sources. We do not believe that additional control measures are cost-effective. At the very least, we recommend that EPA consider sources complying with state-required LDAR programs such as those mandated by PADEP's Exemption 38 and GP-5, be determined as compliant with NSPS OOOOa requirements in order to avoid duplicative, overlapping, and potentially conflicting requirements.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 45.

Commenter Name: Will Whisenant, Safety and Security Operations Coordinator

**Commenter Affiliation:** Virginia Oil and Gas Association (VOGA) **Document Control Number:** EPA-HQ-OAR-2010-0505-7047

Comment Excerpt Number: 4

#### Comment:

# **Compressor Stations**

 Reciprocating compressors are already subject to NSPS regulations; allow those already in place to regulate instead of double dipping with NSPS OOOO and NSPS ZZZZ subparts.

# **Gathering and Boosting Stations**

Leak detection on gathering and boosting stations is included in FERC regulations. Allow
these already standing regulations to work on their own instead of double dipping with
NSPS OOOO regulations and reporting requirements.

**Response:** The commenter provides information regarding compressor stations and gathering and boosting stations. The final rule expands the regulatory requirements for reciprocating and centrifugal compressors to transmission and storage and therefore do not duplicate existing requirements. Regarding interaction with other federal standards, please see section III.E of the preamble to the final rule for more information on relationship with state actions.

**Commenter Name:** Public Hearing Comments On Proposed Climate, Air Quality, and Permitting Rules for the Oil and Natural Gas Industry; Tuesday, September 29, 2015; 9:05 AM -

8:00 PM; Public Hearing #1 - Pittsburgh, Pennsylvania

Commenter Affiliation: None

**Document Control Number: EPA-HQ-OAR-2010-0505-7338** 

**Comment Excerpt Number: 111** 

**Comment:** Finally, we urge the EPA to coordinate its efforts with the agencies -- with other agencies to avoid implementing duplicative requirements that could potentially hinder the continued production and energy that our nation will continue to demand. The rules we're discussing today are a small slice of the pending regulation that our industry is facing. The EPA has also released proposed control technique guidelines for implementation and the pending revised ozone on air quality standard and pending regulatory requirements from the Department of Interior's BLM on federal lands will also add the cumulative impact to our industry in future operations.

**Response:** The commenter notes the importance of coordinating with other agencies in developing federal standards, including the BLM. Please see section III.E of the preamble to the

final rule for more information on the EPA's coordination with BLM in the development of these final standards.

**Commenter Name:** Public Hearing Comments On Proposed Climate, Air Quality, and Permitting Rules for the Oil and Natural Gas Industry; Tuesday, September 29, 2015; 9:00 AM -

11:55 AM; Public Hearing #2 - Pittsburgh, Pennsylvania

Commenter Affiliation: None

**Document Control Number: EPA-HQ-OAR-2010-0505-7338** 

**Comment Excerpt Number: 74** 

**Comment:** In December of 2011, Pennsylvania became one of the first states in the nation to require unconventional natural gas producers to submit data on emissions such as carbon monoxide, sulfur dioxide, volatile organic compounds, particulate matter and others. The Pennsylvania General Assembly codified the annual reporting requirement as part of Act 13 of 2012, which is the Commonwealth's comprehensive environmental protection law related to oil and gas development.

For calendar year 2012, the Pennsylvania Department of Environmental Protection expanded reporting requirements to include methane, as well as additional sources such as compressor stations serving conventional natural gas and coal bed methane production.

With respect to methane, the 2013 emissions inventory data, which was released by DEP in April 2015, showed a 13 percent decrease in total cumulative methane emissions from the national gas industry in Pennsylvania. This decrease is significant particularly given the fact that the number of well sites reporting data for 2013 increased by over 18 percent, while the number of midstream facilities reporting data increased by over eight percent, and natural gas production itself increased in 2013 by nearly 52 percent over the prior year. This phenomenon of decreased methane emissions in spite of the increased activity can be seen across the nation.

This is the testament of voluntary efforts in new and innovative technologies and operator practice that have been implemented over the past several years. States such as Pennsylvania have demonstrated amply their ability to design sufficient controls and safeguards to reduce methane emissions from oil and gas operations. Moreover, the natural gas industry has also demonstrated its commitment to work with the state regulator to install reasonable monitoring and repair programs which reflect the unique circumstances of the state and the industry's operations in the state.

We are concerned with the EPA's second-guessing its state's successful efforts to reduce methane emissions, imposing unreasonable, costly, and unnecessary additional federal standards on top of insisting state regulatory requirements, only serves to make natural gas development less attractive economically and stifles the advancements of American energy security, while providing little, if any, measurable environmental benefit.

We urge the EPA to recognize the successful and functioning state regulatory programs and existing industry practices that have already substantially reduced methane emissions and allow them to continue without interruption or added complication from federal regulations.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6852, Excerpt 24.

Commenter Name: W. Michael Scott, General Counsel

Commenter Affiliation: Trilogy Operating, Inc.

**Document Control Number: EPA-HQ-OAR-2010-0505-6603** 

**Comment Excerpt Number: 52** 

**Comment:** Alternatively, EPA should exempt affected facilities in states with their own state VOC and methane emissions regulations from the requirements in the Methane NSPS.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 45.

Commenter Name: W. Michael Scott, Vice President and General Counsel

Commenter Affiliation: CrownQuest Operating, LLC

**Document Control Number:** EPA-HQ-OAR-2010-0505-6703

**Comment Excerpt Number: 45** 

**Comment:** Alternatively, EPA should exempt affected facilities in states with their own state VOC and methane emissions regulations from the requirements in the Methane NSPS.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 45.

Commenter Name: Bradley C. Cross, President/Partner Commenter Affiliation: Big Star Oil & Gas, LLC

**Document Control Number: EPA-HQ-OAR-2010-0505-6757** 

Comment Excerpt Number: 45

**Comment:** Alternatively, EPA should exempt affected facilities in states with their own state VOC and methane emissions regulations from the requirements in the Methane NSPS.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 45.

Commenter Name: Glenn Prescott

**Commenter Affiliation:** RK Petroleum Corporation

**Document Control Number:** EPA-HQ-OAR-2010-0505-6788

**Comment Excerpt Number: 46** 

**Comment:** Alternatively, EPA should exempt affected facilities in states with their own state VOC and methane emissions regulations from the requirements in the Methane NSPS.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 45.

Commenter Name: W. Jeffrey Sparks

Commenter Affiliation: Discovery Operating, Inc.

**Document Control Number:** EPA-HQ-OAR-2010-0505-6790

**Comment Excerpt Number: 46** 

**Comment:** Alternatively, EPA should exempt affected facilities in states with their own state VOC and methane emissions regulations from the requirements in the Methane NSPS.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 45.

Commenter Name: Andrew Casper

Commenter Affiliation: Colorado Oil & Gas Association (COGA)

Document Control Number: EPA-HQ-OAR-2010-0505-6889

**Comment Excerpt Number: 9** 

Comment: Compliance with Colorado's Regulation No. 7 Requirements is Sufficient for Federal Purposes, Such that Compliance with Quad Oa Requirements is Not Also Required

The preamble specifically requests comment on "how to determine whether existing state requirements (*i.e.*, monitoring, recordkeeping, and reporting) would demonstrate compliance with this federal rule." 80 *Fed. Reg.* at 56,595. COGA strongly feels that Colorado operators are in a unique position and that, for the reasons stated above, the Colorado regulations should be treated accordingly. The promulgation of Regulation No. 7 in 2014 ushered in an aggressive LDAR program as well as other VOC/methane emission control programs. Emissions benefits are already being realized and recent data demonstrates they will continue to be significant into the future. Moreover, Colorado operators have spent significant time and resources complying with these rules. Thus, although there may be parts of the Colorado Regulation No. 7 Program that do not perfectly align with what is being proposed (or may be in the final rule), we believe that, on the whole, the Colorado program is precisely the kind of program that EPA should deem sufficient to satisfy compliance with the proposed federal rule—and therefore be deemed to be exempt from compliance with Quad Oa—as the Regulation No 7 Program is the most stringent

state regulatory program of its kind. Accordingly, COGA respectfully requests that EPA formally recognize in the final rule (either in the preamble or in the text of the final rule) that Colorado operators complying with Regulation No. 7 are deemed to be in compliance with the federal rule and that no additional federal requirements under Quad Oa would be necessary.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6889, Excerpt 4.

**Commenter Name:** Public Hearing Comments On Proposed Climate, Air Quality, and Permitting Rules for the Oil and Natural Gas Industry; Wednesday, September 23, 2015; 9:00

AM - 7:55 PM; Public Hearing #1 - Denver, Colorado

Commenter Affiliation: None

**Document Control Number: EPA-HQ-OAR-2010-0505-7337** 

**Comment Excerpt Number: 181** 

**Comment:** We also urge EPA to accommodate operators that are currently implementing leak monitoring and repair requirements, whether due to existing air permits; state regulations, for example Colorado's Regulation 7; or voluntary commitments, to satisfy the federal rules that --federal rule requirements and minimize regulatory burden for those operators.

Finally, we urge EPA to coordinate its efforts with other agencies to avoid implementing duplicative requirements that could potentially hinder the continued production of the energy that our nation will continue to demand. The rules we are discussing today are a small slice of the pending regulations that our industry is facing. EPA has also released proposed control technique guidelines for implementation of the pending revised ozone air quality standard and pending regulatory requirements from the Department of Interior's BLM on federal lands. These will also add to the cumulative impact to our industry in future operations.

**Response:** See responses to DCN EPA-HQ-OAR-2010-0505-6889, Excerpt 4 and DCN EPA-HQ-OAR-2010-0505-7338, Excerpt 111.

**Commenter Name:** Andrew Casper

Commenter Affiliation: Colorado Oil & Gas Association (COGA)

Document Control Number: EPA-HQ-OAR-2010-0505-6889

**Comment Excerpt Number: 6** 

Comment: Cooperative Federalism Demands That Colorado Operators not be Made to Comply With Both State and Federal VOC Reduction Programs

The 1970 Clean Air Act (CAA) establishes a "division of responsibilities" between the state and federal governments commonly known as "cooperative federalism," under which the federal and state governments work together to achieve federal regulatory goals. *Train v. Natural Resources Defense Council, Inc.*, 421 U.S. 60, 79 (1975); *see also* 42 U.S.C. § 7411(d). Policy development

and enforcement under the CAA relies on this concept: the federal government sets standards for permissible emissions of substances affecting ambient air quality, while individual states retain responsibility for implementing programs to enforce these standards. This system empowers states to act under federal law, while also allowing for development and implementation of state innovation and expertise to reach—and often exceed—federal goals and standards. Critically, the CAA states that "air pollution control at its source is the primary responsibility of States and local government." 42 U.S.C. § 7401(a)(3) (emphasis added).

Congress made clear that states are not required to use the particular system identified by EPA to reach an ultimate goal or standard; rather, states have the flexibility to use other systems, tailored to their state, so long as they achieve the same or greater level of pollution reduction. Ultimately, the CAA's cooperative federalism regime should foster cooperation, not discourage it, especially in cases where, as with Colorado, states have been aggressive in addressing local air pollution problems—here, the DMA/NFR NAA. Colorado's O&G sector (as discussed above) has played a significant role in addressing the ozone issues in Colorado, and, although industry did not necessarily agree with all aspects of the final adopted Regulation No. 7 Program, COGA members recognize that it is a particularly aggressive approach that surpasses EPA's proposed Quad Oa. Ignoring Colorado's regulations and forcing operators in the state to comply with duplicative and arguably less stringent federal rules would undermine this fundamental construct of the CAA. In COGA's view, the history of O&G regulation in Colorado, while not always perfect, is an example of how cooperative federalism should work in practice. We strongly urge EPA to honor this framework.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6889, Excerpt 4.

**Commenter Name:** Andrew Casper

Commenter Affiliation: Colorado Oil & Gas Association (COGA)

Document Control Number: EPA-HQ-OAR-2010-0505-6889

Comment Excerpt Number: 7

#### Comment: State Emissions Standards Need Only be as Stringent as Federal Standards

The preamble to the Quad Oa proposal arguably misstates the relevant and applicable standard. 80 Fed. Reg. at 56,595 ("EPA acknowledges that a state may have more stringent state requirements..."). The standard for determining whether a state requirement(s) can stand in the shoes of a federal requirement(s), however, is not whether it is "more stringent" than the federal standard but whether it is as stringent. See 40 C.F.R. § 60.10(a) ("The provisions of this part shall not be construed in any manner to preclude any state or political subdivision thereof from . . . [a]dopting and enforcing any emission standard or limitation applicable to an affected facility, provided that such emission standard or limitation is not less stringent than the standard applicable to such facility"); North Dakota v. Swanson, No. 11-3232 (SRN/SER), 2012 WL 4479246 (D. Minn. Sept. 30, 2012) ("States must establish performance standards that are at least as stringent as the EPA guidelines") (discussing CAA Section 111(d) and referencing 40 C.F.R. § 60.24(c)).

The concept of the federal requirements acting as a floor, rather than a ceiling, is a cornerstone of the CAA's cooperative federalism structure discussed above. EPA has supported this principle across numerous other CAA programs for the past 30 years. For example, when discussing state roles in the New Source Review program, EPA indicated that it did not implement "base programs with a one-size-fits- all mentality and certainly did not have the goal of 'preempting' State creativity or innovation . . . [I]f a State decides it does not want to implement any of the new applicability provisions, that State will need to show that its existing program is at least as stringent as our revised base program." 67 Fed. Reg. 80,186, 80,241 (Dec. 31, 2002). Similarly, before EPA can approve alternative requirements in place of a National Emissions Standard for Hazardous Air Pollutants (NESHAP), the state must demonstrate that "the level of control in the state rule must be at least as stringent as the level of control in the Federal rule." 76 Fed. Reg. 30,545, 30,547 (May 26, 2011) (discussing the Maine Department of Environmental Protection's request for approval to implement and enforce the Maine Dry Cleaner Rule as a partial substitution for the amended Perchloroethylene Dry Cleaning Facilities NESHAP). In fact, EPA has expressed its intention to allow states to set more—or, as appropriate, even less—stringent emission standards. Specifically, while discussing performances standards and state plans for the control of certain pollutants under CAA Section 111(d), EPA indicated that "it is inaccurate to argue that, because EPA's emission guidelines will reflect best available technology considering cost, States will be unable to set more stringent standards . . . States that believe additional control is necessary or desirable will be free under section 116 . . . to require more expensive controls . . . On the other hand, States will be free to set more lenient standards, subject to EPA review . . . in the case of welfare-related pollutants and in cases of economic hardship." 40 Fed. Reg. 53,340, 53,343 (Nov. 17, 1975). This "less stringent" concept has since been codified at 40 C.F.R. § 60.24(f), to be applied in specific circumstances to certain "designated facilities:"

States may provide for the application of less stringent emissions standards or longer compliance schedules than those otherwise required . . . provided that the State demonstrates with respect to each such facility (or class of facilities): 1) Unreasonable cost of control resulting from plant age, location, or basic process design; 2) Physical impossibility of installing necessary control equipment; or 3) Other factors specific to the facility (or class of facilities) that make application of a less stringent standard or final compliance time significantly more reasonable.

Based on these examples, the fact that, in some rare cases, Colorado's program may not precisely mirror the standards of the federal program is neither surprising nor fatal. More importantly, EPA has latitude to, and should allow states to be flexible—just as Colorado has been—in addressing air pollution in their respective states. This latitude is particularly appropriate in this case given that EPA is proposing a work practice and *not* a performance standard or emissions limit. COGA believes the Colorado Regulation No.7 Program easily meets the applicable "as stringent" standard; and is more stringent in key respects than what EPA has proposed. For this reason, it would be entirely appropriate to carve-out from federal requirements operators already complying with Colorado's Regulation No. 7 Program or, as discussed in Section III.D., alternatively permit compliance with Colorado's LDAR program to demonstrate compliance with Quad Oa's LDAR requirements (and so be exempt from the same).

**Response:** Please see sections VI.F.1.i, VI.F.2.i, and VI.K of the preamble to the final rule with regard to this issue.

Commenter Name: Andrew Casper

**Commenter Affiliation:** Colorado Oil & Gas Association (COGA) **Document Control Number:** EPA-HQ-OAR-2010-0505-6889

**Comment Excerpt Number: 8** 

Comment: EPA Should be Consistent in Recognizing Enforceable State Programs, Similar to Storage Tanks Under Quad O

EPA should follow a similar structure with respect to Quad Oa that it did for Quad O: that is, recognizing that operators are not required to comply with both a state and federal program where the state program is enforceable and provides the same or greater emissions benefits as the federal program. With respect to determining Quad O applicability for storage tanks, Colorado made clear that the applicability "determination may take into account requirements under a legally and practically enforceable limit in an operating permit or other requirements established under a Federal, State, local or tribal authority." *See* Memorandum from Mark McMillan, Unit Supervisor, Oil and Gas Team, Colorado Air Pollution Control Division, October 15, 2013; *see also* PS Memo 14-03/GP 08, August 8, 2014 at 21 ("[B]y establishing an enforceable emission limit for your storage tank below the 6 tpy applicability threshold, NSPS OOOO will not apply to the storage vessel").

Although it is a work practice standard (not emission limits) largely at issue in Quad Oa, we believe the same principles regarding recognition of enforceable state requirements should apply. The central function of EPA's legally and practically enforceable rule is to ensure controls and other requirements at a facility, which are enforceable under a state rule or permit, among others, achieve the same or greater emissions benefit as would otherwise occur under the federal program. Here, there is no dispute that the Colorado LDAR program provides emissions benefits notwithstanding the fact it is not an emission limit per se. For example, under Colorado's Regulation No. 7, operators who are required to and do comply with the LDAR program at well sites are allowed to estimate fugitive emissions at those sites using emission factors from Table 2-8 of the 1995 EPA Protocol for Equipment Lead Emission Estimates (Document EPA-453/R-95-017). See Reg. No. 7 § XVII.F.2. This is an express recognition that implementation of Colorado's LDAR program reduces fugitive emissions (i.e., following LDAR implementation, Table 2-4 from the same EPA protocol, which vastly overestimates fugitives and is not representative of actual conditions, is no longer appropriate for estimating or permitting fugitives). Analogous to tank controls, the Colorado LDAR program is a recognized, legally and practically enforceable work practice standard that reduces emissions as recognized by § XVII.F.E.

EPA has itself recognized the interplay between emission limits and work practices, recognizing work practices to be a legally binding restriction on emissions from a source, so long as CAA requirements are met via components of the work practice. *See, e.g.*, "State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA's SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls To Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction; Final Rule," 80 *Fed. Reg.* 33,840 (June 12, 2015). Specifically, EPA recognizes that "SIP emission limitations do not necessarily have to be expressed in terms of a numerical level of emissions . . . .

[F]or some source categories, under some circumstances, it may be appropriate for the SIP emission limitation to include a specific technological control requirement or specific work practice requirement that applies during specified modes of source operation, such as startup and shutdown." Id. at 33975 (emphasis added). When choosing such an approach, however, "work practice standards must meet the otherwise applicable CAA requirements (e.g., be a RACT-level control for the source as part of an attainment plan requirement) and the necessary parameters to make it legally and practically enforceable (e.g., have adequate recordkeeping, reporting and/or monitoring requirements to assure compliance)." Id. at 33916. Therefore, a legally and practically enforceable work practice can act as an alternative emission limitation, provided that there is a clear understanding of when the work practice standard applies (or does not); a detailed description of the requirements of that standard; and adequate monitoring, recordkeeping, and reporting requirements. In fact, as EPA acknowledges, § 111 authorizes the Agency to promulgate and enforce work practice standards where "it is not feasible . . . to prescribe or enforce a standard of performance" which then enjoys the same force and effect as a standard of performance for purposes of § 111. 42 U.S.C. §§ 7411(h)(1), (5). The Colorado Regulation No. 7 Program, and LDAR requirements in particular, meet or exceed each of these requirements: emission standards are not feasible for this type of emissions in this sector; the rules are clear and detailed; they contain reasonably achievable control technology (RACT)-level controls as evidenced by similar requirements in the draft CTGs; compliance with the same can be monitored and assessed; and, given operational size, nuance, and complexity, a singular emissions limitation applicable to all O&G facilities is not feasible.

Furthermore, the Quad Oa proposal itself recognizes that that duplicative recordkeeping and reporting may exist between the NSPS, Subpart W, and other state and local rules, and that EPA "is trying to minimize overlapping requirements on operators." *Id.* at 56,616. Therefore, as with storage tanks, for each of the reasons discussed above, EPA should make clear in Quad Oa that operators complying with such a state program are not also required to comply with the federal program. We further encourage EPA to recognize that Colorado's program meets each of these criteria either through a specific discussion in the preamble to any final rule or in the final Quad Oa rule text.

**Response:** See sections VI.F.1.i, VI.F.2.i, and VI.K of the preamble to the final rule for more detail regarding this issue.

Commenter Name: Bruce Pendery

Commenter Affiliation: Wyoming Outdoor Council

**Document Control Number:** EPA-HQ-OAR-2010-0505-6760

**Comment Excerpt Number: 3** 

Comment: The Need to Ensure the EPA's Proposed NSPS Regulations Reflect Wyoming's P-BACT1 Guidance

The EPA's proposed NSPS regulations for oil and gas sector emissions sources or types are outlined in Section VII and VIII of the Federal Register Notice and in the proposed Subpart

OOOOa NSPS regulations. 80 Fed. Reg. 56610 to -614, 56618 to -645 and 56665 to -669 (Sept. 18. 2015). The following table presents oil and gas industry VOC and methane emissions sources of types that EPA proposes to regulate under its NSPS standards and the sources Wyoming already regulates under its P-BACT guidance which includes limits on HAP emissions.

EPA Proposed NSPS Regulations Applicable to:	State of Wyoming PBACT Guidance Applicable to:	
	EPA Proposed Rule Specifies the Same Source/Type as the Wyoming P-BACT	EPA Proposed Rule Does Not Explicitly Specify the Same Source/Type as the Wyoming P- BACT
Pneumatic controllers	Pneumatic controllers	
Pneumatic pumps	Pneumatic pumps	
Fugitive emissions	Fugitive emission	
Well Completions	Well Completions	
Centrifugal compressors		
Reciprocating Compressors		
Leaks at natural gas processing plants		
Storage vessels		Produced water tanks
		Flashing
		Dehydration units
		Truck loading
		Blowdown/Venting

As the table illustrates, the EPA proposes four areas of regulation that explicitly use the same terminology as the current Wyoming P-BACT guidance-for pneumatic controllers, pneumatic pumps, fugitive emissions, and for well completions. Additionally, the EPA proposes to regulate four other emissions sources or types that are not specified explicitly in the Wyoming P-BACT -centrifugal compressors, reciprocating compressors, leaks from natural gas processing plants, and storage vessels. However, as indicated in the table and as discussed below, the EPA's provision for "storage vessels" and the State of Wyoming's "produced water tanks" differ little. Last, the Wyoming P-BACT applies to four additional emissions sources or emissions types that are not explicitly; referenced under the EPA's proposed NSPS regulations - flashing, dehydration units, truck loading, and blowdown/venting. It is the four areas of possible difference between the EPA's proposed regulations and the State of Wyoming's P-BACT guidance, and the nominal difference for controls on storage vessels versus produced water that is the focus of our comments in this section.

Produced water tanks

Our first concern relates to the EPA's proposal to regulate "storage vessels" and the existing Wyoming P-BACT policy that regulates "produced water tanks." There may be little or no difference in the emission sources that are controlled under these two titles, but the terminology nevertheless is different.

The EPA proposes to define a storage vessel to mean "a tank or other vessel that contains an accumulation of crude oil, condensate, intermediate hydrocarbon liquids, or produced water and that is constructed primarily of non-earthen materials . . . which provide structural support" 80 Fed. Reg. 56696. Wyoming does not define produced water tanks. The definition of "storage vessel" appears to include a "produced water tank." But the EPA should make this explicit in the commentary on the final rule. It should single out Wyoming's P-BACT for produced water tanks and state it is included under the definition of storage vessels. This will help prevent any confusion or misunderstanding due to the difference in terminology.

With respect to the substantive controls the EPA is proposing for storage vessels. They appear to differ in important respects from Wyoming's P-BACT guidance for produced water tanks. Under EPA's regulations. VOC emissions will have to be reduced by 95 percent within 60 days of startup at storage vessels, or uncontrolled VOC emissions will have to be maintained at less than 4 tons per year (tpy). 80 Fed. Reg. 56667. Other control requirements also apply. Under Wyoming's P-BACT as currently written4, in the concentrated development area, Upper Green River Basin, and the Jonah Pinedale Anticline Development Area VOC and HAP emissions from produced water tanks have to be reduced by 98 percent. In some cases these reductions have to be made on the first date of production and in others within 60 days of the first date of production. The EPA should strongly consider increasing the emission control requirement for storage vessels to a 98 percent level so that its regulations are equivalent to Wyoming's. It should also consider making storage vessel controls applicable on the first date of production, as is required in many cases in Wyoming.

#### Flashing

Flashing is the second emission source that the State of Wyoming regulates under its PBACT guidance which is not explicitly mentioned in EPA's proposed NSPS rule. We believe that the EPA should ensure that VOC and methane emissions resulting from flashing are controlled under its NSPS rules. These are a significant source of ozone precursors and greenhouse gases.

Wyoming defines flashing in its P-BACT guidance as follows:

Flashing losses occur when produced liquids (crude oil or condensate) are exposed to temperature increases or pressure drops as they are transferred from production vessels to other vessels or to atmospheric storage tanks. For purposes of this guidance, the term "flash emissions" refers to VOC and HAP pollutants associated with entrained natural gas vapors released to the atmosphere from hydrocarbon liquids in surface production equipment. This production equipment may include gun barrels, separators, treaters, produced water tanks, gas drips, free-water knockouts, etc.

Wyoming P-BACT Guidance at 29. The State of Wyoming then puts in place significant statewide regulations of these emissions. Generally speaking, flashing emissions of VOC and HAP have to be reduced by 98 percent on the first date of production or within 60 days of the first date of production.

The EPA's proposed regulations of storage vessels will likely also include flashing emissions. However, that is not explicitly stated. This should be changed. If the EPA will regulate flashing emissions under the controls for storage vessels, it should be made explicitly clear.

Moreover, it appears the EPA would define storage tanks as individual tanks rather than per Wyoming's approach where all tanks co-located at a well site have flashing controls. Additionally, Wyoming defines flashing more broadly than EPA's storage tank requirement because Wyoming includes separators and other equipment in addition to tanks. Wyoming PBACT Guidance at 6, 12, 19, and 25. These differences should be reconciled.

At a minimum the EPA should regulate flashing emissions to the 98 percent level that Wyoming does. The EPA should ensure its regulations use the language that is used in the Wyoming guidance to the extent possible to prevent any uncertainties or confusion about the scope or application of the state and federal emissions control frameworks.

# **Dehydration Units**

The next source of VOC, methane, and HAP emissions that Wyoming controls but which are not explicitly included or mentioned in the EPA's proposed NSPS regulations are dehydration units. While no mention is made of "dehydration units" in the Federal Register notice for this rulemaking the EPA does propose to define "dehydrator." 80 Fed. Reg. 56694.

We would ask again that the EPA ensure the terminology it uses for these NSPS regulations bears as much resemblance as possible to Wyoming's existing P-BACT guidance provisions. This is necessary to prevent confusion and uncertainty under the EPA's regulatory regime and the state's guidance. Ensuring compatibility and comparability in the terminology used in the two regimes should be a goal in this rulemaking.

Wyoming defines dehydration unit in its P-BACT guidance. They are operated as follows:

Glycol, usually tri-ethylene glycol (TEG), is used in dehydration units to absorb water from wet produced gas. "Lean" TEG contacts the wet gas and absorbs water. The TEG, now considered "rich" is routed through a flash separator and/or reboiler for regeneration. Vapors released from the flash separator and reboiler still vent contain regulated air pollutants.

Wyoming P-BACT Guidance at 2. The EPA should ensure that a similar definition is found in the federal NSPS regulations and that provisions are made to regulate emissions from dehydration units.

Under Wyoming's P-BACT guidance, emissions of VOCs and HAPs are regulated at dehydration units in the statewide, concentrated development area, Upper Green River Basin,

and Jonah Pinedale Anticline Development Area. Generally speaking, emissions of VOCs and HAPs at these units must be reduced by 98 percent. The EPA should ensure that similar provisions apply to dehydration units subject to federal control.

# Truck loading

In the proposed NSPS regulations the EPA makes no reference to "truck loading" emissions which is the term being proposed for usage in the Wyoming P-BACT guidance. The EPA should review Wyoming's truck loading P-BACT guidance and put in place similar Federal regulations. This would put the EPA's regulations in alignment with the proposed P-BACT guidance in Wyoming.

Wyoming's proposed truck loading P-BACT guidance would require vapor collection systems capable of capturing a minimum of 70 percent of the truck loading vapors, and these vapors would have to be routed to a combustion device capable of destroying 98 percent of the VOC and HAP emissions. The EPA should put in place similar requirements.

### Blowdown/Venting

This is another area of emissions control under Wyoming's P-BACT that is not specifically mentioned in the EPA proposed rule. Wyoming recognizes Blowdown/Venting as being "associated with liquids unloading, wellbore depressurization in preparation for maintenance or repair, hydrate clearing, emergency operations, equipment depressurization, etc." Wyoming P-BACT Guidance at 11, 18, 24, and 28. Wyoming's P-BACT requires operators to use best management practices (BMPs) to control emissions due to Blowdown/Venting and VOC and HAP emissions "shall be minimized to the extent practicable."

While the EPA does not recognize Blowdown/Venting in the proposed rule, it does refer to "liquids unloading" as a possible area of regulation in the proposed rule. Unfortunately, the EPA is not proposing to regulate this activity. See, e.g., 80 Fed. Reg. 56614-615 (stating "at this time the EPA does not have sufficient information to propose a standard for liquids unloading"). This is despite the fact that EPA believes, based on information in its "white papers" and a publication by Allen et al. that "the emissions from liquids unloading operations are significant" id. at 56645.

The EPA should put in place similar federal regulations for the control of VOC and methane emissions from Blowdown/Venting activities and liquids unloading operations. There is no reason for this activity to only be subject to state control. If the EPA were to put in place regulations governing liquids unloading, it would include Blowdown/Venting emissions and thus make the state and federal regulations comparable.

**Response:** See sections V.I, VI.K, and III.E of the preamble to the final rule for information regarding these issues. Additionally, we appreciate the commenter's recommendations that we regulate additional emission sources, including flashing, dehydration units, truck loading, and blowdown/venting. However, we did not propose any requirements on these emission sources and are not including them as affected facilities under the final rule. We are gathering additional

information on some of these sources in the upcoming information collection request. For additional information on that effort, please see section III.E of the preamble to the final rule.

Commenter Name: Bruce Pendery

Commenter Affiliation: Wyoming Outdoor Council

**Document Control Number:** EPA-HQ-OAR-2010-0505-6760

**Comment Excerpt Number: 5** 

Comment: The EPA Should Recognize Wyoming's Leadership in Oil and Gas Sector Air

Pollution Control

The State of Wyoming has long been a leader in controlling air pollution from the oil and gas industry, particularly well site emissions. Wyoming's first P-BACT guidance for this sector went into effect in the mid-1990s, long before any other state was regulating this industry and long before the EPA's 2012 oil and gas sector NSPS regulations were put into effect.

Because of its leadership role, the EPA should recognize Wyoming's P-BACT. Where the state's controls are as stringent. Or more stringent than EPA's proposed regulations, provision should be made for those controls to govern lieu of federal requirements.

For example, as the EPA recognizes. "Wyoming is the only state of which we are aware that has air emission standards for pneumatic pumps." 80 Fed. Reg. 56625. As part of its review based on Wyoming's guidance for pneumatic pumps, EPA found additional mitigation options for controlling emissions from these pumps. *id.* Wyoming's controls for well completions (green completions) have also influenced EPA. *id.* at 56628. Wyoming's controls on fugitive emissions influenced EPA's selection of options for controlling VOC and methane emissions from fugitive releases and from compressor stations. *id.* at 56634, 56639, We also note that Wyoming's P-BACT guidance generally applies to HAPs as well as VOC emissions and the EPA is not explicitly proposing to regulate HAPs as part of this rulemaking. The EPA should consider exemptions or exceptions to this rulemaking where a state like Wyoming already has control regimes in place that meet the requirements of this rulemaking.

**Response:** The commenter notes Wyoming's leadership in controlling air pollution from the oil and gas industry. Please see section III.E of the preamble to the final rule for more information on the relationship with state programs.

Commenter Name: Christine Berg, Mayor, et al. Commenter Affiliation: City of Lafayette, Colorado

**Document Control Number: EPA-HQ-OAR-2010-0505-7034** 

**Comment Excerpt Number: 2** 

**Comment:** Draft EPA rules that are currently out for public comment are a good first step, but they fall short of the Colorado model in a few key areas. We ask that you help us encourage EPA to take a stronger look at the Colorado rules particularly regarding requiring frequent (at least quarterly) leak inspections at drilling sites and in terms of including requirements to reduce pollution from existing sources.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 55.

**Commenter Name:** Public Hearing Comments On Proposed Climate, Air Quality, and Permitting Rules for the Oil and Natural Gas Industry; Wednesday, September 23, 2015; 9:00

AM - 7:55 PM; Public Hearing #1 - Denver, Colorado

Commenter Affiliation: None

**Document Control Number:** EPA-HQ-OAR-2010-0505-7337

**Comment Excerpt Number: 4** 

**Comment:** EPA rules are a step in the right direction; however, the EPA should know that Colorado has been taking action to cut this pollution. As EPA moves forward, it should look to Colorado as a shining example for a template. Colorado's first-in-the-nation methane rules are the equivalent, in pollution cuts, of taking all the cars and trucks of Colorado off the roads. They also eliminate more than a hundred thousand tons of methane from our air. And I believe a previous speaker mentioned this as well.

I'm happy to see the EPA moving ahead with similar rules to try and develop the kinds of stronger requirements to reduce methane and smog-forming pollution nationwide. Cutting methane emissions just makes good sense. Nationwide rules have been very cost effective, since every ounce of methane captured is an ounce the oil and gas -- oil and gas industry can sell.

Moving forward, EPA should take a hard look at what Colorado has done to strengthen its proposal in these key areas:

Colorado's rules apply to existing wells, and the EPA's proposal only applies to new ones. This is a huge loophole that needs to be closed. Our air is dirty now, so we need to address thousands of wells out there, without delay.

The EPA rule also needs stronger and more frequent leak detection and repair inspections; four times a year, as Colorado requires for most source leak detection. Twice a year, with the possibility of even less frequent inspections than the EPA has proposed, is not good enough for our air.

Colorado has shown what is possible. I've seen it happen here in the 30 years I've been a resident. It's now time for EPA to level the playing field for all the oil and gas industry across the U.S. with strong and sensible nationwide action. I believe that this could continue to happen where we make changes in our air quality, and my constituents will thank you for doing that, as long as you make it a little bit stronger than you have.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 55.

**Commenter Name:** Public Hearing Comments On Proposed Climate, Air Quality, and Permitting Rules for the Oil and Natural Gas Industry; Wednesday, September 23, 2015; 9:00

AM - 7:55 PM; Public Hearing #1 - Denver, Colorado

Commenter Affiliation: None

**Document Control Number:** EPA-HQ-OAR-2010-0505-7337

**Comment Excerpt Number: 164** 

**Comment:** Our members have also identified some initial concerns with several aspects of the proposed rules related to leak detection and repair. I'll refer to that as LDAR. As others have commented or will comment here today, the Colorado LDAR program is not a translatable model, for many reasons, including the necessity of the program and the fact that the DJ Basin is very unique in terms of infrastructure and access.

We recognize that the proposal does not merely copy the Colorado program, and we urge the EPA not to do so in the final rule.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6852, Excerpt 24.

Commenter Name: John Robitaille

**Commenter Affiliation:** Petroleum Association of Wyoming (PAW) **Document Control Number:** EPA-HQ-OAR-2010-0505-6854

**Comment Excerpt Number: 5** 

**Comment:** Overreach by EPA: EPA has overstepped its authority in regulating oil and gas development in Wyoming. EPA's Proposed Rule interferes with the State of Wyoming's well-developed and tailored state regulations aimed at reducing emissions and protecting air quality.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 45.

Commenter Name: Will Whisenant, Safety and Security Operations Coordinator

Commenter Affiliation: Virginia Oil and Gas Association (VOGA)

Document Control Number: EPA-HQ-OAR-2010-0505-7047

**Comment Excerpt Number: 15** 

**Comment:** Set these proposed regulations as guidelines for each state's implementation due to the vast differences in each state's natural gas and oil industries.

**Response:** The EPA disagrees that the final standards should be guidelines instead. In addition to this final rule, the EPA is working to finalize other related actions including issuing Control Techniques Guidelines for reducing VOC emissions from existing oil and gas sources in certain ozone nonattainment areas and states in the Ozone Transport Region. For more information, please see section III.E of the preamble to the final rule.

**Commenter Name:** Public Hearing Comments On Proposed Climate, Air Quality, and Permitting Rules for the Oil and Natural Gas Industry; Wednesday, September 23, 2015; 9:10

AM - 8:00 PM; Public Hearing #1 - Dallas, Texas

**Commenter Affiliation: None** 

**Document Control Number:** EPA-HQ-OAR-2010-0505-7336

**Comment Excerpt Number: 66** 

**Comment:** A few -- overview of a few issues and concerns. Statements in the -- in the rules preamble and other statements -- prior statements by Administrator McCarthy who have acknowledged that state regulatory agencies provide effective tools and specific remedies to the problems to be addressed. We urge the EPA to follow through in its rule by allowing state-level regulatory agencies to continue to implement the rule and regulate in the field including reporting, inspection, and documentation.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-6603, Excerpt 45.

Commenter Name: Cory Pomeroy, General Counsel Commenter Affiliation: Texas Oil & Gas Association

**Document Control Number:** EPA-HQ-OAR-2010-0505-7058

**Comment Excerpt Number: 16** 

**Comment:** EPA's Analysis Also Fails to Address the Regulatory Conflicts and Expected "Double Counting" of Reduced Emissions From the Department of Interior's Upcoming Rule to Address Venting, Flaring, and Leaks From Wells on Federal Lands.

The Office of Management and Budget (OMB) is currently reviewing an U.S. Department of the Interior (DOI) draft proposed rule to reduce venting, flaring, and leaks of natural gas from onshore wells located on federal and Indian leases. According to the Administration's Unified

Agenda, the proposed rule will be released December 2015 and finalized by June 2016, roughly the same time period as this Proposed Rule.

EPA's failure to address DOI's upcoming regulation confirms that EPA is inaccurately portraying the benefits and costs of the Proposed Rule by failing to adequately account for past regulations as well as ongoing regulatory actions that may reduce the need for new regulations.

**Response:** The EPA disagrees that we did not address areas of overlap with BLM's proposed rule. See response to DCN EPA-HQ-OAR-2010-0505-7338, Excerpt 111.

Commenter Name: James Martin
Commenter Affiliation: Noble Energy

**Document Control Number: EPA-HQ-OAR-2010-0505-6852** 

**Comment Excerpt Number: 28** 

**Comment:** Finally, Noble also strongly encourages EPA to work closely with the U.S. Bureau of Land Management to ensure that the BLM venting and flaring regulations, which currently are undergoing inter-agency review, are a close fit with the EPA regulations. It would be unfortunate, and costly to operators, if BLM's and EPA's proposals overlap, are duplicative, or even inconsistent. Noble encourages the two agencies not to issue final regulations unless and until the agencies have done all that is possible to ensure their regulations are complementary and not inconsistent or contradictory.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-7338, Excerpt 111.

**Commenter Name:** Public Hearing Comments On Proposed Climate, Air Quality, and Permitting Rules for the Oil and Natural Gas Industry; Wednesday, September 23, 2015; 9:00

AM - 7:55 PM; Public Hearing #1 - Denver, Colorado

Commenter Affiliation: None

**Document Control Number: EPA-HQ-OAR-2010-0505-7337** 

**Comment Excerpt Number: 113** 

**Comment:** Finally, we request the EPA and the Administration better coordinate its regulatory efforts with the Bureau of Land Management. We strongly encourage the EPA to extend the comment period to allow a minimum of 30 days to overlap the proposed -- the proposed BLM Venting and Flaring rule. Without this extension, stakeholders will not have a chance to understand the cumulative and overlapping impacts, in order to provide meaningful feedback, to avoid conflicting requirements across several agencies. Again, thank you for allowing me to speak today.

**Response:** See response to DCN EPA-HQ-OAR-2010-0505-7338, Excerpt 111.

Commenter Name: Ben Shepperd

Commenter Affiliation: Permian Basin Petroleum Association Document Control Number: EPA-HQ-OAR-2010-0505-6849

**Comment Excerpt Number: 99** 

**Comment:** EPA has indicated that it is cooperating closely with the BLM regarding flaring. While communication between government agencies is well and good, the role of each should be remembered. For instance, the BLM would never regulate air emissions for the purpose of the protection of air quality, neither should EPA consider royalties or allocation associated with mineral rights.

*Recommendation:* The BLM and EPA should resist additional regulation that might overlap or that entangles the operating environment.

Response: See response to DCN EPA-HQ-OAR-2010-0505-7338, Excerpt 111.

Commenter Name: Gary Buchler

Commenter Affiliation: Kinder Morgan, Inc.

**Document Control Number:** EPA-HQ-OAR-2010-0505-6857

**Comment Excerpt Number: 5** 

**Comment:** Kinder Morgan encourages the Administration to evaluate existing regulatory programs related to the transmission and storage of natural gas to determine if readily available mechanisms exist to achieve methane emission reductions without development of a significant new regulatory program, including potential revisions to the Pipeline and Hazardous Materials Safety Administration ("PHMSA") regulatory program.

**Response:** The commenter notes the importance of coordinating with other agencies in developing federal standards, including the PHMSA. Please see section III.E of the preamble to the final rule for more information on the EPA's consideration of related state and federal actions. We note that although natural gas pipelines within the transportation and storage segment are within the oil and natural gas source category subject to subpart OOOOa, the final rule imposes no requirements on these pipelines directly. However, the final rule does include requirements on compressors located on the pipeline systems.

Commenter Name: Gary Buchler

Commenter Affiliation: Kinder Morgan, Inc.

**Document Control Number: EPA-HQ-OAR-2010-0505-6857** 

**Comment Excerpt Number: 33** 

Comment: Kinder Morgan believes that more effective ways exist to reduce methane emissions from the natural gas transmission and storage sector than those discussed in the Proposed NSPS OOOOa Rule. More specifically, Kinder Morgan recommends that the Obama Administration take necessary steps to reduce the number of unnecessary blowdowns from the natural gas transmission and storage sector caused by changes in the class location of pipeline segments. Under PHMSA regulations, pipelines are subject to different requirements based upon their "class location." Class location is determined on a location-by-location basis depending upon the density of the buildings along the sliding mile of the pipeline. PHMSA regulations currently require installation of new pipe with limited exceptions, when population density changes the class location of the pipe. To replace a pipeline, the pipeline operator must blowdown the entirety of a segment of pipe (approximately 10 to 15 miles) in order to replace the pipe along any portion of that segment. In a blowdown, the pipeline operator releases to the atmosphere the entire contents (pure natural gas) of the pipeline.

These emissions, which vary depending upon the diameter of the pipeline and operating pressure, can exceed emissions from sources targeted by EPA in the Proposed NSPS OOOOa Rule, specifically leaks. For example, a blowdown of a 15-mile segment of 30" natural gas pipeline will result in a release of approximately 20 MMcf of natural gas (the amount of methane released is dependent upon its composition in the natural gas released). In lieu of replacing the pipelines when there is a change in class location, operators have proposed that PHMSA revise its regulations to allow the use of integrity management programs (including pigging and close interval surveys) which will provide an additional margin of safety while avoiding wasteful replacement of pipe and otherwise unnecessary blowdown emissions. By adopting such integrity management systems, PHMSA would ensure safety appropriate to a particular class, while significantly reducing emissions of methane far beyond the emissions reductions contemplated by the Proposed NSPS OOOOa Rule.

To put the emissions from pipeline blowdowns necessitated by changes to class location in perspective, Kinder Morgan currently has to blowdown on average 8 to 10 segments per year under PHMSA's regulations for class location. Collectively, upgrading 10 segments of pipeline per year would result in approximately 200 MMcf of natural gas released (91,300 metric tons of CO<sub>2</sub>e, approximately 3,650 metric tons of methane). Kinder Morgan operates the largest natural gas network in North America, so nationwide the amount of methane released to unnecessarily upgrade pipelines is significant. Instead, if PHMSA would adopt limitedly revised regulations allowing for integrity management in lieu of pipeline replacement, these tons of methane could be preserved each year. Revisions to provide an alternative to pipe replacement under the PHMSA class location rules to reduce pipeline blowdown should be promoted in lieu of an extensive NSPS regulatory program imposed by EPA. Because such blowdowns are not necessary for safety, and instead are driven by existing regulations (as described above), the Obama Administration should adopt limited revisions under PHMSA's regulatory program to reduce the frequency of those blowdowns, reducing methane emissions while still attaining its

goal of pipeline safety. Such regulatory changes would be far more effective from both a regulatory and cost perspective.

**Response:** Changes to other regulatory programs, such as changes in the class location of pipeline segments under the PHMSA, is beyond the scope of this rulemaking.

Commenter Name: National Wildlife Federation et al. Commenter Affiliation: National Wildlife Federation et al. Document Control Number: EPA-HQ-OAR-2010-0505-6817

**Comment Excerpt Number: 4** 

**Comment:** Strong EPA rules will also complement a forthcoming rulemaking from the Bureau of Land Management to reduce methane waste from oil and gas operations on public land.

**Response:** Comment is a supportive comment to which no response is required.